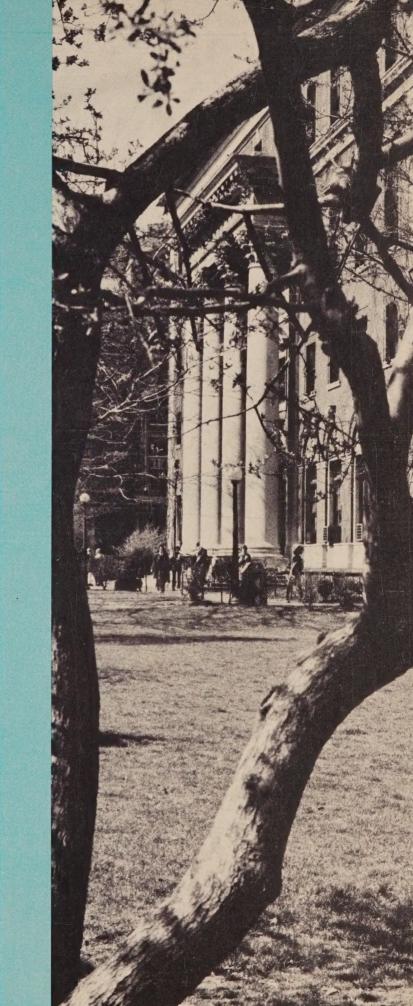
BARNARD COLLEGE





The Undergraduate College of Liberal Arts for Women of Columbia University

Announcement 1976 - 1977



Morningside Heights New York, N.Y. 10027

Communication with the College

The post office address is Barnard College, 606 West 120th Street, New York, N.Y. 10027. The telephone number is (Area Code 212) 280-1754.

Inquiries should be addressed as follows:

General matters pertaining to the College: Office of the President

Academic matters: Dean of Studies

Admission to the freshman class or with advanced standing; information about financial aid for entering students; request for Announcements: **Director of Admissions**

Alumnae: Director of Alumnae Affairs

Faculty and curriculum matters: Office of the Dean of the Faculty

Financial aid and loan funds for students in college: Director of Financial Aid

Gifts or bequests: Director of Development

Health: Director of Health Service
Housing: Director of Residence

Notice of withdrawal: Dean of Studies

Opportunities for self-help; recommendations for employment: Office of Placement and

Career Planning

Payment of College bills: Bursar

Public relations: Director of Public Relations

Requests for transcripts: Registrar Student Activities: Dean of Students

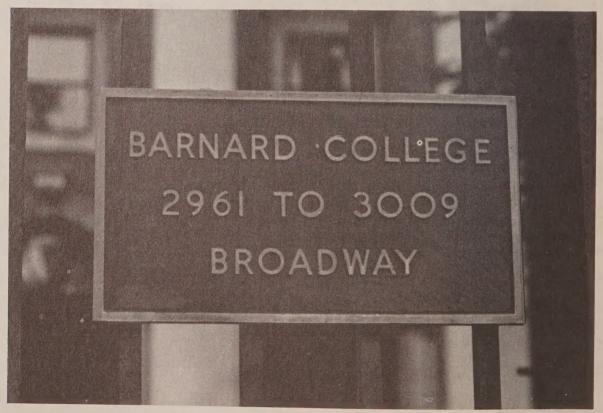


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1976

1070			
JANUARY SUN MON TUE WED THU FRI SAT	FEBRUARY SUN MON TUE WED THU FRI SAT	MARCH SUN MON TUE WED THU FRI SAT	APRIL SUN MON TUE WED THU FRI SAT
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11 12 13 14 15 16 17 18 19 20 21 22 23 24	15 16 17 18 19 20 21 22 23 24 25 26 27 28	14 15 16 17 18 19 20 21 22 23 24 25 26 27	11 12 13 14 15 16 17 18 19 20 21 22 23 24
25 26 27 28 29 30 31	29	28 29 30 31	25 26 27 28 29 30
SUN MON TUE WED THU FRI SAT	JUNE SUN MON TUE WED THU FRI SAT	JULY SUN MON TUE WED THU FRI SAT	AUGUST SUN MON TUE WED THU FRI SAT
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1977			

1377			
JANUARY	FEBRUARY	MARCH	APRIL
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MAY	JUNE	JULY	AUGUST
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15 16 17 18 19 20 21	12 13 14 15 16 17 18	10 11 12 13 14 15 16	14 15 16 17 18 19 20
22 23 24 25 26 27 28	19 20 21 22 23 24 25	17 18 19 20 21 22 23	21 22 23 24 25 26 27
29 30 31	26 27 28 29 30	24/31 25 26 27 28 29 30	28 29 30 31
SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
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4 5 6 7 8 9 10	2 3 4 5 6 7 8	6 7 8 9 10 11 12	4 5 6 7 8 9 10
11 12 13 14 15 16 17	9 10 11 12 13 14 15	13 14 15 16 17 18 19	11 12 13 14 15 16 17
18 19 20 21 22 23 24	16 17 18 19 20 21 22	20 21 22 23 24 25 26	18 19 20 21 22 23 24
25 26 27 28 29 30	23/30 24/31 25 26 27 28 29	27 28 29 30	25 26 27 28 29 30 31
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AUTUMN TERM 1976 – EIGHTY-EIGHTH YEAR

September 1

Wednesday. Columbia College registration.

September 7-9

Tuesday through Thursday. Registration.

September 7

Tuesday. Langauge Placement Examinations.

September 8

Wednesday. Classes begin 9 a.m. Convocation, 1 p.m.

September 10

Friday. Last day for filing applications for deferred examinations in Barnard courses.

September 20-21

Monday and Tuesday. Deferred examinations for students absent from the May 1976 final examinations in Barnard courses. Deferred examinations for C, F, G, V, W, and other Columbia courses must be taken before the end of the semester.

September 24

Friday. Last day for program filing and adding a course. 5:00 p.m.

October 22

Friday. Last day for filing diploma name cards for the degree in January 1977.

October 26

Tuesday. Midterm date.

October 27

Wednesday. Award of October degrees.

November 1

Monday. Academic Holiday.

November 2

Tuesday. Election Day. Holiday

November 4

Thursday. Required meetings for planning programs.

November 15-19

Monday through Friday. Undergraduate Record Examinations for January graduates will be scheduled on one day during this week.

November 18

Thursday. Last day for dropping a course.

November 24

Wednesday. Last day for filing tentative Spring Term programs.

November 25

Thursday through Sunday. Thanksgiving holidays.

December 1

Wednesday. Last day for graduating seniors to submit work not completed in previous terms.

Last day for refund of Spring Term deposit.

December 1-3

Wednesday through Friday. Major examinations for January graduates.

College Calendar 1976-1977

December 6-10

Monday through Friday. Columbia College registration.

December 9-14

Thursday through Tuesday. Optional reading period.

December 14

Tuesday. Last day for filing requests for pass-fail grades.

December 15

Wednesday. Required reading day.

Last day for payment of bill for Spring Term.

December 16

Thursday. Midyear examinations begin.

December 23

Thursday. Autumn Term ends.

Last day for submitting work for courses in which grades of INC were given in the Autumn Term 1975. (Graduating seniors see December 1.)

December 24

Friday, through January 23, 1977, Sunday. Winter recess. Residence halls closed.

SPRING TERM 1977

January 10

Monday. Last day for submitting to the Office of the Registrar work from the Autumn Term 1976 for removal of INC.

January 24

Monday. Classes begin 9 a.m. Langauge Placement Examinations.

January 24-25

Monday and Tuesday. Registration.

January 26

Wednesday. Award of January degrees.

February 4

Friday. Last day for program filing and adding a course. 5:00 p.m.

February 9

Wednesday. Last day for filing applications for financial aid for 1977-78.

Last day for filing applications for deferred examinations in Barnard courses.

February 21

Monday. Washington's Birthday. Holiday.

February 22-23

Tuesday and Wednesday. Deferred examinations for students absent from the December 1976 final examinations in Barnard Courses. Deferred examinations for C, F, G, V, W, and other Columbia courses must be taken before the end of the semester.

February 25

Friday. Last day for filing diploma name cards for the degree in May 1977.

March 10

Thursday. Midterm date.

March 12-20

Saturday through Sunday. Spring holidays.

College Calendar 1976-1977

March 21-25

Monday through Friday. Undergraduate Record Examinations for May and October graduates will be scheduled on one day during this week.

March 24

Thursday. Last day for dropping a course.

April 1

Friday. Last day for graduating seniors to submit work not completed in previous terms.

April 12

Tuesday. Required meetings for planning programs.

April 20-22

Wednesday through Friday. Major examinations for May and October graduates.

April 29-May 4

Friday through Wednesday. Optional reading period.

May 2

Monday. Last day for filing requests for pass-fail grades.

May 3

Tuesday. Last day for filing tentative Autumn Term programs.

Last day for filing name cards for the degree in October 1977.

May 5

Thursday. Required reading day.

May 6

Friday. Final examinations begin.

May 13

Friday. Spring Term ends.

Last day for submitting work for courses in which grades of INC were given in Spring 1976, (Graduating seniors see April 1.)

May 15

Sunday. Baccalaureate Service.

May 16

Monday. Last day for payment of deposit for 1977-78.

May 18

Wednesday. Conferring of degrees.

May 27

Friday. Last day for submitting to the Office of the Registrar work from the Spring Term 1977 for removal of INC.

September 6-8

Tuesday through Thursday. Registration for Autumn Term 1977.

September 8

Thursday. Classes begin 9 a.m.

Last day for filing applications for deferred examinations in Barnard courses.

TRUSTEES OF BARNARD COLLEGE

Chairman

Eleanor (Mrs. John, Jr.) Elliott

Vice-Chairmen

Francis T. P. Plimpton

Robert L. Hoguet

Helene (Mrs. Mark) Kaplan

William T. Golden

Treasurer

Forrest L. Abbott

Clerk

Nancy T. Cook

Arthur G. Altschul

Helen (Mrs. Frank) Altschul, Emeritus Trustee

June (Mrs. Jonathan) Bingham

Carolyn (Mrs. F. Philip) Brotherton

Dorothy (Mrs. Eric) Eweson

Richard M. Furlaud

Ellen V. Futter

Blanche (Mrs. Seymour) Graubard

Iola S. Haverstick (Mrs.)

Martha Bennett (Mrs. Ernest) Heyde

Robert S. Hutchins

Elizabeth (Mrs. Eliot) Janeway

Wallace S. Jones

William A. Marsteller

President William J. McGill, ex officio

Jacquelyn Anderson Mattfeld, Honorary Trustee

Helen (Mrs. Randall) McIntyre

Samuel R. Milbank

Roger H. Morley

Marilyn Karmason (Mrs. Norton) Spritz

Iphigene (Mrs. Arthur H.) Sulzberger, Emeritus Trustee

Barbara M. Watson

Catherine (Mrs. Frederick J.) Woodbridge

FACULTY REPRESENTATIVES TO MEET WITH TRUSTEES

Professor Renée Geen

Professor Kenneth Janes

STUDENT REPRESENTATIVES TO MEET WITH TRUSTEES

Michele Evans

Lily Pu

THE FACULTY OF BARNARD COLLEGE

Jacquelyn Anderson Mattfeld, 1976, President of Barnard College and Dean

in the University

B.A., Goucher; Ph.D., Yale

Remington Patterson, 1955, Acting Dean of the Faculty and Professor of English

A.B., M.A., Ph.D., Yale

Barbara S. Schmitter, 1957, Dean of Studies and Associate Professor of Psychology

A.B., Nebraska; M.A., Columbia

Helene F. deAguilar, 1972, Instructor in Spanish

A.B., Barnard; M.A., New York University; Ph.D., Columbia

Philip V. Ammirato, 1974, Assistant Professor of Biological Sciences

B.A., City College of New York; Ph.D., Cornell

Helen H. Bacon, 1961, Professor of Greek and Latin

A.B., Ph.D., Bryn Mawr

Helen Phelps Bailey, 1933, Professor of French

A.B., Barnard; M.A., Ph.D., Columbia

Peter D. Balsam, 1975, Assistant Professor of Psychology

B.A., State University of New York; M.A., Ph.D., North Carolina

Bernard Barber, 1952, Professor of Sociology

A.B., M.A., Ph.D., Harvard

Absent on leave, 1976-77

Victoria F. Barr, 1967, Visiting Artist in Art History

B.F.A., Yale

Annette K. Baxter, 1952, Adolph S. and Effie Ochs Professor of History

A.B., Barnard; M.A., Smith, Radcliffe; Ph.D., Brown

Joan S. Birman, 1973, Professor of Mathematics

A.B., Barnard; M.A., Columbia; Ph.D., New York University

Jeffrey M. Blustein, 1974, Assistant Professor of Philosophy

A.B. Minnesota; Ph.D., Harvard

Vilma Bornemann, 1971, Instructor in Spanish

A.B., Barnard; M.A., Columbia

Brigitte L. Bradley, 1962, Professor of German

A.B., William and Mary; D. d'Université, Strasbourg; M.A., Ph.D., Columbia

Lila Ghent Braine, 1974, Professor of Psychology

B.A., M.A., Ph.D., McGill

Alice Braunwarth, 1969, Associate in Physical Education

A.B., Hunter; M.S., Springfield

Joel P. Brereton, 1974, Assistant Professor of Religion

B.A., Kenyon; M. Philo., Ph.D., Yale

LeRoy C. Breunig, 1953, Professor of French

A.B., DePauw; Ph.D., Cornell

Demetrios Caraley, 1961, Professor of Political Science

A.B., Ph.D., Columbia

Patricia Carpenter, 1961, Associate Professor of Music

A.B., California; Ph.D., Columbia

Absent on leave, Autumn Term.

Luz Castaños, 1967, Associate in Spanish

A.B., M.A., Hunter

Elizabeth Louise Caughran, 1956, Associate in English

A.B., Russell Sage; M.A., Columbia

The dates refer to the beginning of service in the College and not necessarily to the assumption of the current title.

Faculty

John W. Chambers, 1972, Assistant Professor of History B.S., Temple; M.A., San Francisco State; Ph.D., Columbia Absent on leave, Spring Term.

Sally Chapman, 1975, Assistant Professor of Chemistry A.B., Smith; Ph.D., Yale

Vassilios Christides, 1971, Assistant Professor of Modern Greek M.A., U.C.L.A.; Ph.D., Princeton

Joy Chute, 1964, Adjunct Associate Professor of English

Marcelo Coddou, 1975, Assistant Professor of Spanish M.A., Chile; Ph.D., Madrid

Jonathan R. Cole, 1973, Associate Professor of Sociology A.B., Ph.D., Columbia

William A. Corpe, 1956, Professor of Biology A.B., M.A., Wisconsin; Ph.D., Pennsylvania State Absent on leave, Spring Term.

James Crapotta, 1975, Instructor in Spanish B.A., Queens; M.A., Harvard

Oakley Crawford, 1974, Associate Professor of Chemistry B.A., Carson-Newman; Ph.D., Illinois

Dennis G. Dalton, 1969, Associate Professor of Political Science A.B., Rutgers; M.A., Chicago; Ph.D., London Absent on leave, 1976-77.

Elizabeth C. Dalton, 1965, Assistant Professor of English A.B., California; M.A., Ohio State; Ph.D., Columbia

Simone Daly, 1973, Instructor in French Licence-ès-Lettres, Aix-en-Provence

Flora S. Davidson, 1973, Instructor in Political Science A.B., Barnard; M.Phil., Columbia

Samuel Devons, 1970, Professor of Physics B.A., M.A., Ph.D., Cambridge University

Maria Grazia Di Paolo, 1973, Instructor in Italian

A.B., Hunter; M.A., Columbia

Marjorie Housepian Dobkin, 1957-59; 1960, Associate in English A.B., Barnard; M.A., Columbia

Hubert Doris, 1957, Professor of Music A.B., Harvard; M.A., Columbia

Sigalia Dostrovsky, 1971, Assistant Professor of Physics

A.B., Vassar; M.A., Ph.D., Princeton

Patricia L. Dudley, 1959, Professor of Biology A.B., M.A., Colorado; Ph.D., Washington Absent on leave, 1976-77.

Hester A. Eisenstein, 1970, Coordinator of the Experimental College A.B., Radcliffe; M.A., Ph.D., Yale

Daniel Field, 1970, Assistant Professor of History A.B., M.A., Ph.D., Harvard

Barbara M. Fitts, 1969, Associate in Physical Education B.S., Boston

Annette B. Fox, 1966, Lecturer in Political Science A.B., Ph.D., Chicago

James Lee Franklin, Jr., 1975, Assistant Professor of Greek and Latin B.A., Denison; M.A., Queens; Ph.D., Duke

Richard M. Friedberg, 1968, Professor of Physics A.B., Harvard; M.A., Ph.D., Columbia

Serge Gavronsky, 1960, Professor of French

A.B., M.A., Ph.D., Columbia

Renée Geen, 1956, Associate Professor of French

A.B. Brooklyn; M.A., Wisconsin; Ph.D., Columbia

Absent on leave, 1976-77.

Sandra Genter, 1961, Assistant Professor of Physical Education

A.B., Wisconsin; M.A., Columbia

Enrique A. Giordano, 1974, Instructor in Spanish

M.A., Pennsylvania

Jean A. Gooch, 1964, Associate Professor of Economics

A.B., California; M.A., Ph.D., Columbia

Absent on leave, 1976-77.

Tatiana Greene, 1946, Associate Professor of French

Candid, en Droit, Brussels; M.A., Ph.D., Columbia

Richard F. Gustafson, 1965, Professor of Russian

A.B., Yale; Ph.D., Columbia

Absent on leave, 1976-77.

Elizabeth Hardwick, 1965, Adjunct Associate Professor of English

A.B., M.A., Kentucky

Giselle Harrington, 1972, Associate in Education

A.B., Syracuse; M.A., Columbia

Sylvia A. Hewlett, 1974, Assistant Professor of Economics

B.A., M.A., Cambridge; Ph.D., London

Toby Berger Holtz, 1971, Associate in Geography

A.B., Barnard; M.A.T., Harvard; Ed.D., Columbia

William J. Irvin, 1975, Instructor in English

B.A., Notre Dame; M.A., Harvard

Barry M. Jacobson, 1974, Assistant Professor of Chemistry

B.A., Chicago; Ph.D., Harvard

Kenneth H. Janes, 1961, Professor of English and Director of Minor Latham Playhouse

Guillermina Jasso, 1974, Assistant Professor of Sociology

A.B., Our Lady of the Lake; M.A., Notre Dame; Ph.D., Johns Hopkins

Absent on leave, Spring Term.

Peter H. Juviler, 1964, Professor of Political Science

B.E., M.E., Yale; M.A., Ph.D., Columbia

George W. Kelling, 1972, Assistant Professor of Psychology

B.A., Ph.D., Colorado

Clive S. Kessler, 1970-72, 1973, Assistant Professor of Anthropology

B.A., Sydney; Ph.D., London

Marie B. Killingsworth, 1976, Instructor in Economics

B.A., Michigan; B.Phil., Oxford

Grace W. King, 1960, Lecturer in Chemistry

A.B., Maine; Ph.D., Yale

Ruth M. Kivette, 1952, Professor of English

A.B., Barnard; M.A., Ph.D., Columbia; B.D., Union Theological Seminary

Morton Klass, 1965, Professor of Anthropology

A.B., Brooklyn; Ph.D., Columbia

Stephen E. Koss, 1966, Professor of History

A.B., M.A., Ph.D., Columbia

Maire J. Kurrik, 1968, Assistant Professor of English

A.B., Vassar; Ph.D., Harvard

Patricia H. Labalme, 1961-64; 1965, Lecturer in History

A.B., Bryn Mawr; M.A., Ph.D., Radcliffe

Sue Howard Larson, 1965, Professor of Philosophy

A.B., Ph.D., Stanford

Faculty

Marina Ledkovsky, 1969, Associate Professor of Russian Ph.D., Columbia Lydia H. Lenaghan, 1962, Associate Professor of Greek and Latin A.B., Barnard; M.A., Ph.D., Bryn Mawr Darline G. Levy, 1973, Assistant Professor of History A.B., Barnard; Ph.D., Harvard Cynthia B. Lloyd, 1970, Assistant Professor of Economics A.B., Bryn Mawr; M.A., Ph.D., Columbia Maristella de Panizza Lorch, 1951, Professor of Italian Dott. in Lett. e Filos, Rome Joseph L. Malone, 1967, Professor of Linguistics A.B., M.A., Ph.D., California Joseph Masheck, 1971, Assistant Professor of Art History A.B., A.M., Ph.D., Columbia Edith Mason, 1956, Associate in Physical Education B.S., Winthrop; M.S., Louisiana State Robert A. McCaughey, 1969, Associate Professor of History A.B., Rochester; M.A., North Carolina; Ph.D., Harvard John Meskill, 1960, Professor of Chinese and Japanese A.B., Harvard; Ph.D., Columbia Deborah D. Milenkovitch, 1965, Associate Professor of Economics A.B., Radcliffe; Ph.D., Columbia Absent on leave, 1976-77. Barbara S. Miller, 1968, Associate Professor of Oriental Studies A.B., Barnard; M.A., Columbia; Ph.D., Pennsylvania Maria Miller, 1974, Assistant Professor of Biological Sciences Staatsexamen, Munich; Ph.D., City University of New York Jacques-Louis Monod, 1974, Associate Professor of Music Certificat de Recompense, Paris; D.M.A., Columbia Joann Ryan Morse, 1957, Associate Professor of English A.B., Vassar; M.A., Yale Absent on leave, Spring Term. Mary Mothersill, 1963, Professor of Philosophy A.B., Toronto; M.A., Ph.D., Radcliffe Absent on leave, 1976-77. Richard A. Norman, 1954, Professor of English A.B., George Washington; M.A., Ph.D., Columbia Barbara Novak, 1958, Professor of Art History A.B., Barnard; M.A., Ph.D., Radcliffe Dorothea Nyberg, 1968, Associate Professor of Art History A.B., Toronto; M.A., Ph.D., New York University Onora S. O'Neill, 1970, Assistant Professor of Philosophy B.A., Oxford; Ph.D., Harvard Elaine H. Pagels, 1970, Associate Professor of Religion A.B., M.A., Stanford; Ph.D., Harvard Absent on leave, 1976-77. Mary Brown Parlee, 1975, Associate Professor of Psychology B.A., Radcliffe; Ph.D., M.I.T. Frederick G. Peters, 1970, Assistant Professor of German A.B., Pennsylvania; M.A., Columbia; B. Litt., Oxford; Ph.D., Cambridge Lang Hoan Pham, 1972, Instructor in French

A.B., Smith; M.A., Columbia

Marion R. Philips, 1945-55; 1958, Associate Professor of Physical Education A.B. Hunter; M.A., Columbia

Richard M. Pious, 1973, Assistant Professor of Political Science

B.A., Colby; Ph.D., Columbia

Charles Potter, 1973, Instructor in French

A.B., M.A., Ph.D., Columbia

Anne Lake Prescott, 1959-62; 1963, Associate Professor of English

A.B., Barnard; M.A., Ph.D., Columbia

Carol Raye, 1973, Assistant Professor of Psychology

B.S., Illinois; Ph.D., State University of New York

Inez Smith Reid, 1969-70; 1971, Associate Professor of Political Science A.B., Tufts; LL.B., Yale; M.A., California; Ph.D., Columbia

Donald D. Ritchie, 1948, Professor of Biology

A.B., B.S., Furman; M.A., Ph.D., North Carolina

David A. Robertson, Jr., 1940, Millicent Carey McIntosh Professor of English A.B., M.A., Ph.D., Princeton

Jeanette Schlottman Roosevelt, 1951-58; 1962, Associate Professor of Physical Education

B.S., M.A., Texas Woman's University

Jane H. Rosenthal, 1952-55; 1971, Assistant Professor of Art History

A.B., Douglass; Ph.D., Columbia

Abraham Rosman, 1966, Professor of Anthropology

A.B., City University of New York; Ph.D., Yale

R. Christine Royer, 1965, Associate in English

A.B., Western Maryland; M.A., Pennsylvania

Paula G. Rubel, 1965, Professor of Anthropology

A.B., Hunter; Ph.D., Columbia

Susan R. Sacks, 1971, Assistant Professor of Education and Psychology

A.B., Northwestern; M.A., Western Reserve; Ph.D., Columbia

Gertrud M. Sakrawa, 1952, Associate Professor of German

M.A., Columbia; Ph.D., Vienna, Columbia

John E. Sanders, 1969, Professor of Geology

A.B., Ohio Wesleyan; Ph.D., Yale

Anatol K. Sapronow, 1966, Associate in Russian

Russian Gymnasium, Belgrade

Marianna Greene Sapronow, 1967, Associate in Russian

Russian Gymnasium, Munich

Frances Fuchs Schachter, 1972, Assistant Professor of Psychology

A.B., Barnard; Ph.D., Rochester

Peter Schubert, 1970, Instructor in Music

A.B., Columbia

Bernice Segal, 1958, Professor of Chemistry

A.B., Radcliffe; Ph.D., Columbia

Mirella d'Ambrosio de Servodidio, 1964, Professor of Spanish

A.B., Barnard; M.A., Ph.D., Columbia

Ann C. Sheffield, 1969, Assistant Professor of Greek and Latin

A.B., Smith; M.A., Ph.D., Stanford

Maurice Z. Shroder, 1965, Professor of French

B.S., Northwestern; M.A., Ph.D., Harvard

Absent on leave, Spring Term.

Phillip A. Singerman, 1975, Instructor in Political Science and Urban Studies B.A., Oberlin; M.A., Yale

Faculty

Lynda D. Snead, 1971, Instructor in French A.B., Skidmore; M.A., M.Phil., Columbia Janet Soares, 1968, Associate in Dance B.S., Juilliard; M.A., Columbia S. David Sperling, 1974, Associate Professor of Religion A.B., Brooklyn; M.H.L., Jewish Theological Seminary; Ph.D., Columbia Quandra P. Stadler, 1970, Associate in English A.B., Antioch Catharine R. Stimpson, 1963, Associate Professor of English A.B., Bryn Mawr; B.A., Cambridge; Ph.D., Columbia Sandra Stingle, 1967, Assistant Professor of Psychology A.B., Barnard; Ph.D., Columbia Howard M. Teichmann, 1946, Adjunct Professor of English A.B., Wisconsin Patricia Terry, 1958, Lecturer in French A.B., Wellesley; M.A., Ph.D., Columbia Janice Farrar Thaddeus, 1956, Assistant Professor of English A.B., Barnard; M.A., Ph.D., Columbia Eleanor M. Tilton, 1950, Professor of English A.B., Mount Holyoke; M.A., Boston; Ph.D., Columbia Zoya A. Trifunovich, 1959, Associate in Russian B.S., M.A., Columbia Margarita Ucelay, 1943, Professor of Spanish Bach. Instituto-Escuela de Madrid; M.A., Ph.D., Columbia Barry Ulanov, 1951, Professor of English A.B., Ph.D., Columbia; Litt. D., Villanova Absent on leave, Autumn Term. Joan E. Vincent, 1968, Professor of Anthropology B.Sc., London School of Economics; M.A., Chicago; Ph.D., Columbia John Walsh, Jr., 1975, Professor of Art History B.A., Yale; M.A., Ph.D., Columbia Frederick E. Warburton, 1963, Associate Professor of Biology B.Sc., M.Sc., Ph.D., McGill Marcia L. Welles, 1970, Assistant Professor of Spanish A.B., Barnard; M.A., Middlebury; Ph.D., Columbia Suzanne F. Wemple, 1966, Associate Professor of History A.B., California; M.L.S., Ph.D., Columbia. James C. Wendt, 1975, Assistant Professor of Sociology B.S., M.S., Michigan; M.A., Ph.D., California Katherine E. Wilcox, 1971, Associate in Education A.B., City College of New York Chilton Williamson, 1942, Professor of History A.B., M.A., Ph.D., Columbia Hannah J. Zawadzka, 1973, Assistant Professor of Political Science M.A., New School of Social Research; Ph.D., Johns Hopkins Leonard Zobler, 1955, Professor of Geography B.S., M.S., Washington State; Ph.D., Columbia Forrest L. Abbott, 1953. Treasurer and Controller B.S., Southwest Missouri State Teachers; M.A., Ed.D., Columbia Mary Helen McMahon, 1969, Registrar B.S., M.A., Ph.D., Saint Louis

Robert B. Palmer, 1967, Librarian

A.B., Kenyon; M.A., Middlebury; M.S., Simmons

Natalie Sonevytsky, 1959, Reference Librarian A.B., New Rochelle; M.S., Columbia

FACULTY EMERITI

- Helen R. Downes, 1933-1960, Professor Emeritus of Chemistry Ph.D.
- Amelia A. de del Rio, 1930-1962, Professor Emeritus of Spanish Ph.D.
- Millicent C. McIntosh, 1947-1962, President Emeritus Ph.D., LL.D., Litt.D., L.H.D.
- **Thomas P. Peardon, 1923-1965,** Professor Emeritus of Political Science Ph.D.
- Esther Greene, 1944-1967, Librarian Emeritus A.B., B.S.
- Lucyle Hook, 1948-1967, Professor Emeritus of English
- Marion Lawrence, 1929-1967, Professor Emeritus of Art History Ph.D.
- René Albrecht-Carrié, 1945-1969, Professor Emeritus of History Ph.D.
- Eugenio Florit, 1945-1969, Professor Emeritus of Spanish D. en D.
- Virginia D. Harrington, 1942-1969, Professor Emeritus of History Ph.D.
- Jean T. Palmer, 1946-1969, General Secretary Emeritus
 A.B.
- Henry A. Boorse, 1937-1970, Professor Emeritus of Physics and Dean Emeritus of the Faculty
 Ph.D.
- Julius S. Held, 1936-1970, Professor Emeritus of Art History Ph.D.
- Mirra Komarovsky, 1934-1970, Professor Emeritus of Scoiology
- Emma Dietz Stecher, 1945-1971, Professor Emeritus of Chemistry Ph.D.
- Theodor H. Gaster, 1966-1972, Professor Emeritus of Religion Ph.D., D.D., L.H.D., Litt.D.
- Eleanor Rosenberg, 1953-1973, Professor Emeritus of English Ph.D.
- Raymond J. Saulnier, 1938-1973, Professor Emeritus of Economics Ph.D., LL.D.
- George Woodbridge, 1960-1973, Professor Emeritus of History Ph.D.
- Marion Hamilton Gillim, 1952-1974, Professor Emeritus of Economics Ph.D.
- Gladys Meyer, 1948-1974, Professor Emeritus of Sociology Ph.D.
- Basil Rauch, 1941-1974, Professor Emeritus of History Ph.D.
- John Kouwenhoven, 1946-1975, Professor Emeritus of English Ph.D.
- Richard Youtz, 1937-1975, Professor Emeritus of Psychology Ph.D.
- Joseph Gerard Brennan, 1947-1976, Professor Emeritus of Philosophy Ph.D.

Other Officers of Instruction

VISITING FACULTY

John Eatwell, 1976, Robb Professor of Economics

B.A., M.A., Cambridge; Ph.D., Harvard

Donald E. Hutchings, 1972, Adjunct Assistant Professor of Psychology A.B., Lake Forest; M.A., Ph.D., Chicago

William H. Janeway, 1974, Adjunct Assistant Professor of Economics A.B., Princeton; Ph.D., Cambridge

Brian O'Doherty, 1970, Adjunct Professor of Art History M.B., M.C.H., D.P.H., University College, Dublin; M.Sc., Harvard

David A.J. Richards, 1974, Lecturer in Philosophy A.B., Harvard; Ph.D., Oxford; J.D., Harvard

OTHER OFFICERS OF INSTRUCTION

M. Lou Benard, 1974, Instructor (Part-time) in Geography B.A., Buffalo

Constance T. Colby, 1972, Instructor (Part-time) in English B.A., M.A., Michigan

Susan P. Lee, 1974, Lecturer in Economics

B.A., Sarah Lawrence; M.A., Ph.D., Columbia

Brunhilde M. Linke, 1975, Instructor (Part-time) in German B.A., M.A., New York University

Gordon J. Micunis, Instructor (Part-time) in Drama B.A., Tufts; M.F.A., Yale

Dennis B. Parichy, 1969, Instructor (Part-time) in Drama B.S., Northwestern

I. Mark Paris, 1975, Instructor (Part-time) in French B.A., Johns Hopkins; M.A., M.Phil., Columbia

Milton Resnick, 1972, Visiting Artist in Art History

Marvin Shulman, 1968-69; 1975, Associate in German B.A., Coe; M.A., Columbia

Beverly M. Spatt, 1971, Lecturer in Geography A.B., Pembroke; M.A., Ph.D., New York University

Barbara R. Stewart, 1969, Lecturer in Psychology A.B., Barnard; Ph.D., Columbia

Ruth Sussman, 1975, Instructor (Part-time) in French A.B., Barnard; M.A., Johns Hopkins; M.Phil., Columbia



OFFICERS OF ADMINISTRATION

Jacquelyn Anderson Mattfeld, Ph.D., LL.D., President of Barnard College and Dean in the University.

Remington Patterson, Ph.D., Acting Dean of the Faculty and Professor of English Barbara S. Schmitter, M.A., Dean of Studies and Associate Professor of Psychology Doris B. Coster, Ph.D., Dean of Students

Forrest L. Abbott, Ed.D., Treasurer and Controller

Office of the President

Nancy T. Cook, Administrative Secretary Novella I. Landau, Secretary to the President

Office of the Dean of the Faculty

Virginia Shaw, A.B., Director of Institutional Studies and Secretary to the Faculty Julie Marsteller, A.B., College Archivist

Office of the Dean of Studies

Marjorie H. Dobkin, M.A., Associate Dean of Studies Sue Cohn, Ph.D., Assistant to the Dean of Studies Katherine E. Wilcox, A.B., Transfer Adviser Toby Berger Holtz, Ed.D., Class Adviser Vilma Bornemann, M.A., Class Adviser Giselle Harrington, M.A., Class Adviser Grace King, Ph.D., Class Adviser Anya Luchow, A.B., Class Adviser Charles Potter, M.A., Class Adviser Sandra Stingle, Ph.D., Class Adviser Esther Rowland, M.A., Preprofessional Adviser

Office of the Treasurer and Controller

Brett Combs, B.A., Assistant Controller Helen Vanides, Executive Assistant

Office of Admissions

Helen M. McCann, A.B., Director Margaret Dykes Dayton, M.A., Associate Director Dorothy U. Denburg, M.A., Assistant Director

Office of the Associate Alumnae

Dena Warshaw, A.B., Director

Office of Buildings and Grounds

Robert T. Devine, Director
William Pettersen, Manager of Plant Maintenance
Margaret V. O'Shea, Director of Building Services
Salvadore R. Delgado, Assistant Director of Building Services

Office of the Bursar

Frances A. Barry, M.S., Bursar Linda F. Mathison, B.S., Assistant Bursar Violet Parnass, Executive Assistant

Development Office

Barbara V. Hertz, A.B., Director Eleanor Mintz, A.B., Associate Director Jane Gracer, A.B., Director, Barnard Fund Jeannette Parks, Records Administrator

Financial Aid

Theodore P. Stock, M.A., Director

Health Services

Harriette R. Mogul, M.D., Director
Audrey-Jean Sheehy, M.D., Assistant Director
Antonio Calanog, M.D., Consulting Gynecologist
Camillo L. Gugliucci, M.D., Consulting Gynecologist
Zira DeFries, M.D., College Psychiatrist
Barbara Gibbs, M.D., Consulting Psychiatrist
Denise Saks, J.S.D., M.A., M.S., Psychiatric Counselor
Lela Anderson, R.N., Head Nurse
Joan Buckley, R.N., Nurse
Marianne Gelber, R.N., Nurse

Language Laboratory

Ersi L. Breunig, Director

Library

Robert B. Palmer, M.A., M.S., Librarian
Patricia K. Ballou, A.B., B.S., Technical Services Librarian
Elizabeth M. Corbett, M.S., Circulation Librarian
Stephanie M. Krstulovic, Technical Services Librarian
Catherine G. Meakin, M.L.S., Assistant Reference Librarian
Natalie Sonevytsky, M.S., Reference Librarian
Mary Ellen Tucker, M.S., Acquisitions Librarian

Office Services

Winifred Price, Director Myrtle Tate, Assistant Director

Personnel Office

Margaret B. Lowe, M.A., Director Roberta A. Cash, B.S., Assistant Director

Office of Placement and Career Planning

Susan Bolman, M.A., Director Carol Feit, M.A., Associate Director

Office of Public Relations

Sallie Y. Slate, B.S., Director

Office of Purchases and Stores

Mary Bane, Director

Office of the Registrar

Mary Helen McMahon, Ph.D., Registrar Doris Campbell, A.B., Assistant Registrar

Office of Residence

Blanche E. Lawton, M.A., Director Phyllis D. Zadra, M.S., Resident Director, Residence Halls Ann Palony, M.S., Resident Director, Plimpton Hall Kathleen M. Houser, M.S., Resident Director, 600, 616, 620 Monica Smith, Administrative Assistant

Officers of Administration

Office of Safety and Security Raymond E. Boylan, Director

Women's Center Jane S. Gould, M.A., Director



III. An Introduction to the College

BARNARD'S HISTORY

Barnard College was among the pioneers in the late nineteenth century crusade to make higher education available to young women. The history of its achievement is an integral part of the history of Columbia University.

The University had its origin in a royal charter, granted in 1754 by George II, creating King's College. Its operations were interrupted during the Revolutionary War when its buildings were requisitioned by the Continental Armies, but it was reopened in 1784 as Columbia College and, in 1896, was designated a university.

Barnard College grew out of the idea, first proposed by Columbia's tenth president, Frederick A. P. Barnard, that young women be admitted to Columbia. Initially ignored, the idea was developed by President Barnard until it led to the creation of a "Collegiate Course for Women." Under the new plan highly qualified women were authorized to follow a prescribed course leading ultimately to a Columbia degree, but no provision was made for where and how they were to pursue their studies. Destined to fail, this arrangement was abandoned six years later when Columbia's trustees agreed to the establishment of an affiliated college for women. A provisional charter and the promise of funds were secured, and Barnard College was named in honor of its earliest and most persistent advocate.

In October 1889, the first Barnard class met in a rented brownstone house at 343 Madison Avenue with fourteen students enrolled in the School of Arts, twenty-two "specials" enrolled in science because they lacked the entrance requirements in Greek, and a faculty of six.

Nine years later Barnard moved to its present site on Morningside Heights, and in 1900 was incorporated in the educational system of Columbia University with provisions which at that time were unique among women's colleges: it was to be governed by its own Trustees, Faculty, and Dean, and was responsible for its own endowment and plant, while sharing the instruction, the library, and the degrees of a university.

BARNARD TODAY

In contrast to the pioneer days, Barnard today has a teaching staff of almost 200 men and women: outstanding scholars whose primary concern is the education of the undergraduate students at the College, and many of whom bring an added vitality to their teaching from their professional activities outside the classroom. From the original fourteen matriculated students, enrollment has increased to almost 2,000; since 1893 Columbia has awarded its degree to 20,154 Barnard students. The original pledges of support have expanded to current endowment funds of \$19,030,000

An agreement adopted by the Barnard and the Columbia Boards of Trustees in 1973 calls for increased cooperation without assimilation between the two institutions. While Barnard maintains its identity as an independent liberal arts college for women with its own curriculum, faculty, admissions standards, and graduation requirements, it shares the resources of the University. Barnard students have open access to Columbia courses and, as an affiliate of the University, Barnard shares faculty, libraries and facilities with Columbia.

THE CURRICULUM

Specific requirements for the degree are outlined on pages 30-32. Assistance in planning her individual course of study is given by the student's class adviser, a member of the teaching staff who supervises the work of the freshman and the sophomore years.

An Introduction to the College

At the end of this period, each student chooses her major field. During the junior and senior years her major adviser guides advanced study in the area of concentration and other phases of the college work. Twenty-five departments offer major programs and seven interdepartmental majors are also available.

Classes vary in size. Those in which student participation is important are small. Introductory courses and classes taught primarily by the lecture method are often divided into small groups for conference and discussion. Laboratory work in the sciences is conducted with the most modern laboratory equipment. There are opportunities for independent work and students may also be invited to participate in research projects with members of the Faculty.

An integral and pervasive aspect of academic life at Barnard College is the school's Honor System, instituted in 1912.

SPECIAL CONCERNS ABOUT THE EDUCATION OF WOMEN

In keeping with its tradition, Barnard is concerned with the changing role of women today. The Barnard Women's Center, now in its sixth year, reaffirms the College's commitment to helping women realize their potential. It maintains a resource collection of books and articles on women, publishes an annual interdisciplinary bibliography of research on women and has initiated both academic and nonacademic meetings and conferences. Guided by a board of students, faculty, staff, and alumnae, the Center is working to make use of its varied resources to develop effective bonds between the College and women on and off the campus.

Curricular offerings focusing on women are available in a number of departments.

THE CAMPUS

The campus occupies four acres of urban property along Broadway between 116th and 120th Streets. At the southern end of the campus, three residence buildings, Brooks, Hewitt, and Helen Reid Halls, face Altschul Court, a landscaped quadrangle.

Barnard Hall is just north of the open courtyard and contains seminar rooms, classrooms, and faculty offices, as well as a gym, a swimming pool, and dance studios. The College Parlor on the third floor is used for meetings and small social events.

Adele Lehman Hall is a modern five-story building containing the Wollman Library, faculty offices and classrooms. The library has over 140,000 volumes in an open shelf arrangement on three floors. This collection of carefully selected books is designed to cover curriculum requirements as well as to provide opportunities for independent work in many fields. A collection of approximately 3,500 music and spoken records, a large selection of periodicals and journals, photographs and art reproductions housed in a separate room supplement and strengthen the book collection. There are ample listening facilities for records and an audio-visual studio and control room for the recording of tapes and the use of other equipment. The reading areas contain a number of individual study carrels, many of which overlook a lawn surrounded by small trees and shrubs. Barnard students also have access to the University's Butler Library of some four million volumes, one million manuscripts and fifty thousand periodical listings. The other twenty-nine libraries of the University are also available for additional research.

Felen Goodhart Altschul Hall and the Millicent McIntosh Center, which were dedicated jointly in November 1969, face each other across an open plaza. The fourteen stories of Altschul Hall are devoted primarily to the sciences but also house the Herbert H. Lehman Auditorium on the first floor, and a language laboratory on the fourth. The laboratory, which contains 60 booths, is used by both Barnard and Columbia language students. Headquarters for student activities, a snack bar and a lounge are located in the McIntosh Center. Student mailboxes are there as well as music practice rooms, recreation and television rooms, bowling alleys, an art exhibit area, and the Jean T. Palmer Room for conferences.

An Introduction to the College

Milbank Hall occupies the northern extreme of the campus and houses administrative and faculty offices; classrooms; a greenhouse; and the Minor Latham Playhouse, a small well-equipped modern theatre. The Language Departments maintain social and reading rooms in Milbank Hall.

Columbia University is directly across Broadway from the Barnard campus. Off campus, but in the immediate neighborhood, Barnard maintains other residence halls, including: 600, 616, and 620 West 116th Street, three apartment buildings owned by the College and containing suites accommodating five to six girls each; and Plimpton Hall, completed in 1968, which houses 280 students in apartment-style units. Each Plimpton resident lives in a single room in a five-room suite with a central kitchen and bath.

Barnard Camp is a 20-acre tract in Westchester County about 35 miles from New York City. The Camp and its rustic lodge, Holly House, are used by the College for both recreational and educational purposes.

STUDENT LIFE

Barnard's student population is cosmopolitan in nature. While one third of the students have families within commuting distance, the others come from nearly every state and some twenty-five foreign countries.

The students represent diversity in background and training; and a mingling of economic, regional, and cultural strains finds expression in the life of the campus.

Every Barnard student is a member of the Undergraduate Association, which sponsors extracurricular activities reflecting current interests: the college newspaper, the literary magazine, dramatic groups, political and religious organizations, and preprofessional and departmental clubs. Cooperation between Barnard and Columbia groups is common. Many activities, such as the University's chorus and its orchestra, its radio station, and a community service program enlist members from both campuses.

During the past seven years the structure of Barnard's student government has undergone fundamental revision, culminating in the development of tripartite college committees. Students, faculty, and administrators serving on these committees share responsibility for policy decisions in the areas of curriculum, housing, financial aid, orientation, and the library.

The Honor Code, instituted at Barnard in 1912, governs all aspects of academic life. A Judicial Council of undergraduates, faculty and staff, recommends disciplinary action for nonacademic offenses.

Religious organizations and activities with headquarters on the Columbia campus at Earl Hall encompass nearly every faith and are open to all students. The Thursday Noon Meeting at Barnard provides a weekly forum for discussion of a wide range of contemporary issues. Student artists with a diversity of talents and interests collaborate to produce Winter and Spring Festivals.

The Recreation and Athletic Association sponsors many activities including archery, basketball, bicycling, bowling, fencing, swimming, tennis, and volleyball. Crew, hockey, horseback riding, and sailing are club activities. The Council on Intercollegiate Athletics administers three varsity teams: Basketball, Volleyball, and Swimming.

NEW YORK

More than fifty years ago, Nicholas Murray Butler, one of Columbia's great presidents, observed, "New York is intensely cosmopolitan and contact with its life for a short time during the impressionableness of youth is in itself a liberal education." The city is an extension of the campus, utilized by every department to narrow the gap between learning and living. Barnard is a university college in an international city, and today the curriculum affirms and encourages precise and graphic use of its vast metropolitan resources.

Since entering classes are limited in size, admission to Barnard College is on a selective basis. The Committee on Admissions endeavors to choose candidates who seem most receptive to the discipline and challenge of a liberal arts education. Each applicant is considered in terms of her past performance, her individual qualities of mind and spirit, and her ability to pursue a normal course of study.

The College believes it is also desirable for the student body to represent a stimulating variety of schools, both public and independent, from all parts of the United States and from abroad.

Barnard College admits students without regard to race, color, creed, or national origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the College; and the College does not discriminate on the basis of race, color, creed, or national origin in administration of its educational policies, admissions policies, financial aid and loan programs, recreational programs, and other College administered programs.

Students who can visit the college for an interview should plan to do so in the fall of their senior year, or in the late spring of the junior year; others may arrange interviews with Barnard_Area Representatives whose names are listed on pages 226 to 230.

ADMISSION TO THE FRESHMAN CLASS

Application for admission to the freshman class should be made before January 15 of the year of entrance. It is advisable, however, to apply by the end of the junior year or the fall of the senior year in high school. Application forms may be obtained by writing to the Director of Admissions.

A nonrefundable fee of \$20 must accompany each application. Checks or money orders must be in U.S. funds drawn on a U.S. bank, and made payable to Barnard College.

Students are admitted to the freshman class in September. They must be at least fifteen years of age, and should present the following credentials:

Evidence of good character, which is obtained from reports from the applicant's secondary school principal and teachers and, if possible, through a personal interview at the College.

Evidence of sound health, to be submitted as soon as the applicant has been accepted, on forms provided by the Office of Admissions.

Evidence of intellectual ability and achievement, which is reported by the secondary school to the College, and is also demonstrated by the required College Entrance Examination Board tests.

Candidates for admission must offer a college preparatory program from an approved secondary school or should have equivalent education representing a four-year course of study. Academic preparation for admission should be based on the requirements for the A.B., or liberal arts, degree. A recommended program would comprise four years of work in English; three years in mathematics; four years in a foreign language (ancient or modern); one year in a science with laboratory; and one year in history. An introduction to a second foreign language is generally useful. The remainder of the program would include additional work in the aforementioned subjects with the possible addition of music and art.

The Committee on Admissions is willing to consider the applications of students whose preparation may vary from the usual pattern but whose records give evidence of genuine intellectual ability and interest.

Every candidate for admission to the freshman class is required to take the College Entrance Examination Board Scholastic Aptitude Test and three Achievement Tests. The latter must be taken in (1) English composition, (2) a foreign language, and (3) history, science, or mathematics. These examinations should be taken in the senior year, but not

later than the January administration. Achievement Tests in one-year subjects or those completed in the junior year may be taken in the junior year. It is the student's responsibility to direct the College Entrance Examination Board to send official test scores to the Office of Admissions.

EARLY DECISION PLAN

With the other members of the Conference of Liberal Arts Colleges for Women, Barnard has agreed to take action in the fall on applications of well-qualified seniors who have selected their first-choice college. Although they may initiate applications to other colleges, candidates under the Early Decision Plan are expected to make only one Early Decision application. They agree if admitted under Early Decision to withdraw all other applications. Students wishing to apply under the plan should request Early Decision application papers.

First-choice candidates for Barnard admission should send their applications to the Office of Admissions, Barnard College, New York, N.Y. 10027, before November 15. Applications must be accompanied by the \$20 application fee. Decisions on admission and financial aid will be mailed no later than December 15. Any student on whose application an unfavorable decision has been made, or on whose application decision has been postponed until the customary date in the spring, will also be notified by that date. Each applicant will be considered on the basis of (1) the recommendation of her school principal or counselor, (2) her three-year record at school, and (3) the results of the required College Board Scholastic Aptitude Test and the three Achievement Tests taken in her junior year in English composition, a foreign language, and history, science, or mathematics.

The successful candidate will be expected to complete her senior year satisfactorily and to submit a record of that year's work. She will not be asked to repeat any College Board examinations. She must agree to pay to Barnard in January a deposit of \$100, if she is to be a commuting student, and \$300, if she is to be a resident student, to hold her place in the freshman class.

The candidate on whose application decision has been postponed will be given full and careful consideration in the spring. She will be asked to submit a record of her school work for the first half of her senior year and the results of senior College Board Scholastic Aptitude and Achievement Tests as additional evidence.

Candidates on whose credentials favorable action is not taken may file applications at other colleges after receiving their notification from Barnard.

THE COLLEGE ENTRANCE EXAMINATION BOARD TESTS

The College Entrance Examination Board will administer the following series of tests in 1976-77.

Scholastic Aptitude Test
October 16, 1976
(California and Texas only)

Scholastic Aptitude and Achievement Tests November 6, 1976 December 4, 1976 January 22, 1977 March 26, 1977 May 7, 1977 June 4, 1977

Candidates should write directly to the College Entrance Examination Board, Box 592, Princeton, New Jersey 08540, for the Bulletin of Information containing descriptions of

Admission

the Scholastic Aptitude and Achievement Tests, directions for filing applications, and lists of examination centers. When requesting the application forms, candidates should state the month in which they wish to take the tests.

To facilitate the arrangements for the conduct of the tests, all applications should be filed as early as possible. The normal closing date for the receipt of applications in Princeton, New Jersey, for candidates outside the United States, the Canal Zone, Canada, Mexico, and the West Indies is two months before the date of the examination; for all other candidates the closing date is approximately five weeks before the date of the examination. A penalty fee will be charged for applications received later than the normal closing date.

No applications received in Princeton later than two weeks before the examination date will be considered. Candidates may not register for the tests at the examination centers. Each application should be accompanied by the appropriate examination fee. Please refer to the College Board Handbook for information about deadlines and fees.

The Board will report the results of the tests to the institutions indicated on the candidates' applications. The colleges, in turn, will notify the candidates of the action taken on their applications for admission.

ADMISSION WITH ADVANCED PLACEMENT

Students who have completed advanced work in secondary school and who present satisfactory scores on the Advanced Placement Tests of the College Entrance Examination Board may be placed in courses above the level of the freshman year, at the discretion of the departments concerned.

Credit for advanced placement courses is contingent on recommendation by the appropriate Barnard department. Regulations governing mathematics credit are described in the statement of that department. Credit can be given in other subjects for scores of 4 and 5. Up to four course credits may be awarded to an entering student.

ADMISSION OF TRANSFER STUDENTS

Barnard welcomes transfer students and each year accepts between one hundred fifty and two hundred to the sophomore and junior classes. Application for acceptance with advanced standing should be submitted before May 15 for admission in September and before November 15 for admission in January.

Candidates should present a strong record of not less than one year's work at an accredited college, or foreign university, or institution of equivalent grade. In general, credit is given for courses taken at another college which are similar in content to those offered at Barnard. (See also page 32.)

The student should submit her formal application and the following credentials: her secondary school record, a recommendation from her principal and her college dean or class adviser, a complete and official transcript of her college work and a copy of the college catalogue in which the courses she has taken are clearly marked, and the results of the College Entrance Examination Board tests. A candidate will be asked to take the College Entrance Examination Board Scholastic Aptitude Test if she has not already done so. In some cases, credit cannot be assigned until a student has had an opportunity to establish a satisfactory record at Barnard.

Acceptance is subject to receipt of a statement of honorable dismissal, which is a certificate of good character from an authorized college representative, a satisfactory final transcript, and the required health reports. If these credentials are not received, the

student must postpone registration until after classes begin. There is an additional fee for lateness.

Students who are degree candidates at other colleges may apply for permission to enroll for one or two semesters at Barnard. Each applicant must present satisfactory college records and letters of approval from her Dean and her major adviser, and agree to comply with all Barnard regulations concerning attendance and course examinations.

ADMISSION OF FOREIGN STUDENTS

The College is interested in the applications of qualified foreign students. Candidates are expected to take the Scholastic Aptitude Test given by the College Entrance Examination Board. (This test examines the student's ability to understand word relationships and to comprehend what is read, and the ability to understand and solve mathematical problems.) Freshman candidates should also present the Achievement examination results. Requests for an examination center overseas should reach the Board, Box 592,

• Princeton, New Jersey 08540, two months prior to the dates listed on the previous pages.

Knowledge of the English language is essential for admission. It is recommended that applicants take the TOEFL, Test of English as a Foreign Language. Information about registration should be obtained by writing to the TOEFL Program, Educational Testing Service, Princeton, New Jersey 08540. If the results of this examination cannot be presented, students whose native language is not English are required to take the American University Language Center Test, Arrangements for it should be made through the United States Consulate.

During the week of registration (September or January) all foreign students must take English placement tests in writing, aural comprehension, and speech. Failure to pass these tests will necessitate remedial courses in English at Columbia University, either without academic credit or with limited credit, depending on the level of the course and the grade obtained. No credit is assigned for other academic courses until the remedial work is successfully completed.

Limited financial aid is granted to qualified applicants. Admitted students should direct an inquiry to the nearest American Embassy concerning the possibility of securing a Fulbright travel grant. Employment during the first year here is not permitted. Official approval must be obtained from the Immigration and Naturalization Service for paid work after the first year.

In some cases, credit for study at foreign institutions cannot be assigned until a student has had an opportunity to establish a satisfactory record at Barnard. It is hoped that the foreign student will return to her home country and utilize her education after completion of studies in the United States.

Candidates are urged to communicate with the Director of Admissions well in advance of the date they wish to enter, so that the College may assist them with their plans.

READMISSION

Students who have not been registered for more than two consecutive terms must make application for readmission to the Director of Admissions by November 15 for the Spring Term and by May 15 for the Autumn Term. Completed applications include all required credentials (medical reports, transcripts, recommendations) and a nonrefundable fee of \$20.

V. Degree Requirements

ACADEMIC REQUIREMENTS FOR THE A.B. DEGREE

Requirements for the Bachelor of Arts degree are flexible and have been planned to serve as a framework for the study of various fields of human thought. They should provide a foundation in the liberal arts and sciences and a basis for more intensive work in specific fields. All requirements must be completed within six years of the student's matriculation as a freshman. These requirements call for the completion of 35 semester courses and include the following:

I. Basic

English A. (Foreign students please refer to page 29.)

One science (two semesters), with laboratory. See departmental statements (Biological Sciences, Chemistry, Geography, Geology, Physics, Psychology) for specific courses which fulfill the requirement. With special permission, two sciences may be combined.

Foreign language. Competence in an ancient or modern foreign language. This requirement may be fulfilled either by passing an examination with a sufficiently high score, or by satisfactory completion of one of the designated courses in this catalogue. (See the statement under the appropriate language department for further details.) For languages not offered at Barnard, the student should consult the Chairman of the Language and Literature Committee.

II. General

Completion of six semester courses outside the major department, selected from the categories listed below. No more than two in any single category may be counted.

- 1. Art history; music; Dance 65,66
- 2. Literature in the language in which it was originally written
- 3. Philosophy; religion; Oriental Humanities; Studies in the Humanities
- 4. History; Oriental Civilizations
- 5. Mathematics
- 6. Anthropology; economics; geography; political science; linguistics; sociology

III. Major

A major field, elected in the second term of the sophomore year, will consist of at least eight courses, as prescribed by the department. Each department requires, as specified, a senior essay or a major examination or some equivalent demonstration of proficiency in the discipline. A major may be chosen in any one field, or in such combinations as are approved by the Committee on Programs and Academic Standing.

IV. Physical Education

Four terms required. Two terms in the freshman year and two additional terms.

V. Length of Residence

Students are expected to be registered for full-time work for four years. Barnard residence requirements for transfer students are determined by their previous college residence and may not be fewer than four regular academic terms. Permission to complete work for the degree while registered *in absentia* may be granted under certain conditions on application to the Committee on Programs and Academic Standing.

SENIOR SCHOLAR PROGRAM

The Senior Scholar Program allows a qualified student to undertake a single project in the senior year, or in one semester of the senior year, normally the second. The program is intended for the student who is unusually well prepared in an academic discipline or in one of the performing arts. A student with such qualifications should consult the Dean of Studies by midsemester of the second term of the junior year. At the conclusion of the junior year, the student should have completed all basic and general requirements for the degree.

EXPERIMENTAL COLLEGE

The Experimental College was begun in 1969 by students who believed that learning could best occur in a group devoted to the study and practice of educational change. In the basic independent study course, students develop projects that may either complement or contrast with their regular curriculum. A committee of faculty members and students assist the coordinator in screening proposals for group and individual projects, in helping to initiate projects, and in devising methods of assessing them. The number of students enrolled for credit in this course is limited to forty per semester. For further details on eligibility and credit, and for the other course descriptions, see page 128.

GRADING SYSTEM

Academic standing and eligibility for graduation are determined by the quantity and quality of the student's work. Quality of work is indicated by the following grades: A or A—, excellent; B+, B, B—, good; C+, C, C—, fair; D, poor; F, failure, and P, passed without a specific grade.

A course is marked Inc. (incomplete) to indicate postponement of required work and Abs. (absent) to indicate absence from the final examination. Failure to complete such work according to terms set by the Faculty will result in marks of NC (no credit) if the completed portion of the work is passing, or F if prior work is unsatisfactory.

The entry Y signifies that the grade on completion of the second term will apply to the first term as well.

WDF signifies withdrawal from a course without formal notification to the Registrar, and is considered equivalent to F.

Pass-fail grades are recorded for all students in some courses and at the individual request of the student in courses for which letter-grades are normally assigned. Requests for P grades must be filed with the Registrar each term by the date set by the Faculty (see College Calendar). The following regulations apply to all students.

At least 29 of the 35 courses required for graduation must be assigned letter grades.

All courses required for the major must be assigned letter-grades.

Grades of P are not included in the grade point average.

No limitation is placed on the number of pass-fail grades which may be recorded in a single term, except those rules which apply to the Dean's List and to eligibility for financial aid.

In the computation of grade averages, marks for courses are awarded points on the following scale: A = 4, B = 3, C = 2, D = 1, F = 0. For every plus or minus unit an adjustment of +0.3 or -0.3 is made. In order to be recommended for the degree a student must maintain a cumulative average of 2.00 (C) for 35 or more courses

Degree Requirements

completed with grades of D or above. At the end of each term all records are examined. Normally only those students with cumulative averages of 2.00 or above are permitted to remain in college. Continuance in college of students whose work falls below this average depends upon promise of future achievement and is determined by the Committee on Programs and Academic Standing.

Courses which receive marks of D may not be counted toward the minimum number of courses required in the major field, although they are included in the average for the major.

REQUIREMENTS FOR TRANSFER STUDENTS

Transfer work is evaluated after a complete official transcript is received in the Office of the Registrar. Transfer students are asked to submit catalogues and course descriptions. When possible, estimates of credit granted and requirements fulfilled will be made available before registration.

Credit for approved transfer work at accredited institutions is allowed in proportion to the degree requirements of the student's previous college and is converted to an equivalent proportion of the thirty-five courses required for Barnard graduation. Acceptable transfer work does not usually include applied or professional courses or more than the equivalent of two Barnard studio courses. Summer work is not included in initial credit estimates. Transfer students may apply for credit for previous summer courses under the regulations described in the section on Summer Study.

To receive a Barnard degree, a transfer student must attend Barnard for at least four regular academic terms and must complete at least eighteen courses while registered in the college, including no fewer than six courses in the major field. Additional major courses as well as basic and general requirements may be satisfied by transfer courses. Exemption from the Foreign Language requirement may be attained on the basis of College Entrance Examination scores alone or by a combination of those scores and additional college work. Those who do not receive exemption must complete satisfactorily one of the designated courses in this catalogue. (See the statement under the appropriate language department for further details.)

General college honors are awarded to transfer students when both over-all and Barnard averages meet the required academic standards.



REGISTRATION

Class advisers are appointed from the teaching staff and may be consulted by students with individual questions or for information about the various services and activities of the college. Freshmen and sophomores plan their programs in conference with class advisers and obtain their signatures on all official forms and documents. Major advisers are appointed in each department to aid juniors and seniors in planning their general programs and in completing the requirements of their particular fields.

Registration and program-filing take place each term according to a schedule mailed to all students before the beginning of the term. Failure to register or to file a program at the assigned times will entail the payment of additional and progressively greater fees. Permission to register or to file programs cannot be granted after the fifth week of the term.

No student may be registered simultaneously in any other school or college without the consent of the Dean of Studies.

LANGUAGE PLACEMENT EXAMINATIONS

Fulfillment of the foreign language requirement or placement in a language course may be achieved on the basis of College Entrance Examination Board scores or previous college courses or both. Examinations are given before registration for students who have studied foreign languages but who cannot be given placement in the above ways. Any student who wishes to take a placement examination may do so, and she must accept the placement she receives.

ACADEMIC DISCIPLINE

Enrollment in the College, award of academic credit, and conferring of the degree are subject to disciplinary powers vested by the Barnard Trustees in appropriate faculty, administrative, and tripartite bodies.

Each student who registers at Barnard agrees to maintain an honor code which provides that she will not ask for, give, or receive help in examinations or quizzes, or present oral or written work that is not entirely her own. Library regulations and independent study courses are also governed by the code.

The honor system is enforced by an Honor Board which has a membership of students and faculty members. A fuller explanation of the system may be found in *A Guide to Barnard*.

ATTENDANCE

Students are expected to attend classes regularly. Frequent or prolonged absences from the College or from classes may cause a student to forfeit the right to complete course work or take final examinations.

All absences due to illness must be reported to the Office of Health Services. Illness is considered an excuse for absence only if the student's statement is filed immediately upon her return to college.

Barnard is a nondenominational college with an academic calendar which does not provide for religious holidays. In the scheduling of general college meetings, examinations, and deadlines, every effort is made to avoid the dates of major religious observances. Students who cannot attend classes on such days may find it necessary to make individual arrangements with instructors to fulfill course requirements.

WITHDRAWAL WITHIN A TERM

A student not subject to discipline for infraction of College rules may withdraw from the

General Information

College during the term by giving notice of intention to withdraw in writing on forms obtained from the Office of the Dean of Studies. Signature by a parent or guardian is required. Failure to submit the proper notification on the part of a student who withdraws while College is in session may result in a report of WDF for the term's work. For information on refund of tuition, see page 199.

WITHDRAWAL AT END OF TERM

A student who plans not to register for the following term should file an appropriate form in the Office of the Dean of Studies. A student in good health who leaves with her record complete and who is in good standing may re-register within one year without reapplying through the Office of Admissions. If she confirms her intention to return by writing to the Dean's office by April 1 for the Autumn Term or November 15 for the Spring Term, no readmission fee will be charged. After an absence of one year a student must file readmission forms through the Office of Admissions and pay readmission fees.

CLASSIFICATION OF STUDENTS

Students are classified as follows:

Freshmen — those who have completed fewer than 7 courses

Sophomores — those who have completed 7 courses

Juniors — those who have completed 15 courses

Seniors — those who have completed 25 courses

Unclassified - those who have not yet been assigned definite credit on transfer

Nonmatriculated - those who are not candidates for the degree

No matriculated student may change her status to that of nonmatriculated student.

PROGRAM-FILING

Programs are filed with the Registrar on designated dates in each term (see College Calendar). After these dates, new courses may not be added, and other changes are subject to the following regulations:

Section Changes. Sections may not be changed except at the written request of the instructor.

Dropping Courses. A course may be dropped with the written approval of the class adviser (for freshmen and sophomores) or the major adviser (for juniors and seniors). Courses which are officially dropped before a fixed date (see College Calendar) are not recorded on permanent transcripts. After that date, a course may be dropped only with approval of the Committee on Programs and Academic Standing, and it will appear on the transcript followed by "WD" (withdrawal).

COLUMBIA UNIVERSITY COURSES

All programs require an adviser's written approval. **C** courses, **F** courses, and **W** courses below 4000 (except education) may be elected without additional approval.

Juniors and seniors who elect courses which are not listed in this announcement and which are not in their major fields should obtain approval of their class advisers in addition to signatures of major advisers. The numbers of such courses are prefixed by A, B, E, G, J, K, L, M, Q, R, T, U, W education, W4000 and above, Z.

General Information

All Teachers College courses not cross-listed as part of a Barnard offering are subject to approval of the Committee on Programs and Academic Standing and to payment of additional fees.

Normally, only courses which are credited in their respective catalogues with 3 or more points may be used to satisfy the requirements for the degree. Exceptions to this regulation include applied music activities which carry partial course credit and which may involve extra charges, and approved laboratory units in science courses.

SUMMER STUDY

Students are expected to complete the work for the degree in eight academic terms at Barnard. Summer courses may be credited by the approval of the Committee on Programs and Academic Standing for purposes of accelerating or of making up deficiencies in numbers of courses or in requirements. No more than four summer courses may be taken for credit toward the degree.

Requests for summer study credit must receive the written approval of the chairman of the appropriate Barnard department. This endorsement may be secured in advance and filed with the Registrar. Students are responsible for insuring that official reports of summer work grades are submitted to the Registrar as soon as possible in the ensuing autumn term. The following regulations apply to all summer work.

Not more than two one-semester courses may be elected in any one summer session.

Courses of less than six weeks' duration are not normally credited.

Laboratory units are not credited for summer science courses.

No course with a grade lower than C will be credited toward the degree.

Grades will not be included in the Barnard average.

FINAL EXAMINATIONS

Final examinations are scheduled at the end of each semester (see College Calendar).

Deferred examinations for Barnard courses, given in September and February, are open only to those students whose work is satisfactory and who were absent from the regular examinations for reasons of illness or emergency. Exceptions to these conditions can be made only by petition to the Committee on Programs and Academic Standing before the regular examination period begins.

Absence for reasons of health should be reported to the Office of Health Services in person or by telephone on the day of the examination.

Examinations missed in December are to be taken the following February or, in cases of prolonged illness, in September of the same year. Those missed in May are to be taken in September of the same year. If a student absents herself without a valid excuse from a final or deferred examination, she will receive a grade of zero for that examination. Applications for deferred examinations are filed with the Registrar by designated dates (see College Calendar). A payment of \$10 for each examination must accompany the application. A senior who has missed an examination at the end of her last term may apply for an early deferred examination.

Arrangements for deferred examinations in Columbia University courses must be made by the student with the instructors, and should be completed during the term following registration for the course.

EXAMINATIONS DURING THE TERM

Instructors are not required to give make-up examinations to those absent from previously announced tests. An instructor who is willing to give a make-up test may request a

General Information

report of illness from the College Physician or acceptable evidence of other extenuating circumstances.

READING PERIOD

There are no class meetings on the last class day before the final examination period in each term. This interval may be extended for any class, at the option of the instructor, to the full week prior to the examination period.

TRANSCRIPTS

Transcripts for the previous term are sent to all students in February and June without charge. Additional unofficial copies of transcripts may be obtained from the Registrar upon the written request of the student. Official copies of transcripts bearing the seal of the College and the signature of the Registrar of the College can be sent only to academic institutions, business organizations, and government offices, at the request of the student. A fee of \$1.50 is charged for each transcript ordered.

DEGREES

Students are recommended by the Faculty of Barnard College to the Trustees of Columbia University for the degree of Bachelor of Arts. Degrees are granted in May, October, and January. A statement of intention to complete the work for the degree on any one of these dates must be filed with the Registrar at the announced time (see College Calendar). Graduation ceremonies are held in May.

HONORS

The Faculty awards honors to students who complete work for the degree with distinction (cum laude), with high distinction (magna cum laude), and with highest distinction (summa cum laude). Students whose records include work done at another institution will be eligible for honors if both the over-all and the Barnard averages meet this requirement. Departmental honors are awarded to graduates who are recommended by their departments for distinguished work in their major fields.

DEAN'S LIST

A Dean's List, which contains the names of students who deserve special mention for superior scholarship, is compiled at the end of each academic year. Eligibility is based on at least three grades each term, exclusive of those courses receiving P.

PHI BETA KAPPA

The Barnard section of the Columbia University chapter of Phi Beta Kappa was founded in 1901. Election to the national honor society is a recognition of scholarship, and Barnard students of exceptionally high standing are eligible. For students under the thirty-five course plan, eligibility for election as a junior will require twenty-seven completed courses, and as a senior, thirty completed courses. Questions concerning Phi Beta Kappa should be referred to the Office of the Dean of Studies,

HEALTH

The Student Health Service provides diagnosis and treatment of most chronic and all acute medical conditions. The staff is composed of a Director (an internist), consultants in Adolescent Medicine, Gynecology, and Dermatology, two psychiatrists, one psychiatric counselor and three nurses.

Complete examinations are performed for seniors in the Autumn Term and sophomores

in the Spring Term. They are not mandatory but are recommended and are necessary if health certificates are needed.

All students regardless of residence must immediately report any illness, however minor, to the Office of Health Services. If resident students wish to have someone other than the Health Services physicians care for them, their parents should address a request to the Director and send her the name and address of the doctor before registration.

HOUSING

Barnard strives to maintain as diversified a housing program as possible, providing several options for its students. These options include traditional dormitories, self-contained suite arrangements, and apartment units in college-owned buildings adjacent to the campus. In a cooperative exchange with Columbia College about 210 spaces are available for those who choose coeducational arrangements. Policies regarding eligibility for housing and manner of assignments are formulated by a Tripartite Housing Committee with a membership of students, faculty, and administration. A more complete description of each facility may be found below.

Eligibility

The College has residence facilities for approximately 1,140 students or approximately 60% of the student population. In order to assign available space on the most equitable basis certain eligibility criteria have been established:

- 1. A student must be registered for a full academic program. Exceptions are generally made only for second semester seniors who need to take less than a full program to complete the degree requirements or for students who have permission from the Dean of Studies to take a reduced program.
- 2. A student is classified as a "resident" if the principal residence of the parent or legal guardian is in the geographic area classified by the College as beyond a commuting area.
- 3. Any student may live off campus regardless of class rank. A permission form signed by the parent or legal guardian must be on file in the Housing Office for any student under 18 years of age.
- 4. A "commuter" is a student whose permanent residence is within the geographic area classified by the College as the commuting area. This total area is further divided into four zones so that as space in residence halls becomes available it can be offered first to those in the zone of farthest distance and so on. Class rank is also considered with priority given to seniors, then juniors, etc.
- 5. A commuter who is offered and accepts residence space retains "commuter" status and must reapply for housing the next academic year as a "commuter." It is generally not possible to increase the financial aid of a "commuter" when she chooses to accept residence space.
- 6. A student is responsible for reporting any change in permanent address to the Registrar of the College.

Assignments

Returning upperclass students exercise choice in room assignments through a draw. The general order of assignment is as follows: resident upperclass; incoming resident freshmen; readmitted resident students; resident transfer students. Commuters are offered surplus space after the above have been housed.

General Information

Housing Units

Brooks, Hewitt and Reid Halls or "B-H-R" at 3001 Broadway, are operated as a single complex with space for approximately 515 students. It is a supervised dormitory with a professional staff of director, graduate assistants, and student residence counselors. Rooms are primarily singles and doubles. Freshmen are usually assigned to double rooms. All students living in these halls are required to subscribe to the College meal plan. Reid Hall is an all-female building, housing primarily freshmen. Brooks and Hewitt are predominantly upperclass dormitories. The lower floors are co-educational and the upper floors remain all-female. Rooms are \$890 singles; \$840 doubles or other multiple occupancy per academic year. Board \$690 per academic year; fifteen meals per week (Monday through Friday).

616 West 116 Street, an apartment-style supervised residence directly across the street from the other halls, provides housing for 207 residents in suites of single and double rooms accommodating five or six students. Each suite has a kitchen and bath. Rooms are \$955 singles; \$905 doubles per academic year. Subscription to the food plan is optional.

Plimpton Hall, an apartment-style supervised dormitory on Amsterdam Avenue and West 121 Street, a short walk from the main campus, provides housing for 280 residents in suites of five single rooms. Each suite has a kitchen and bath. Rooms are \$955 per academic year. Subscription to the food plan is optional. There are presently 115 Columbia students residing there in all-male suites.

College-Owned Apartment Units

'620' West 116 Street, and '600' West 116 Street. Barnard College has limited space available for students in these apartment buildings. There is no resident supervision. Seniors have first priority for this space. The rooms are \$955 for singles and \$905 for doubles per academic year. Subscription to the food plan is optional.

MARRIED STUDENTS

Students who plan to marry during the academic year and continue in college are asked to notify the Dean of Studies. Married students, as a rule, will not be allowed to remain in the college residences. They will be subject to the financial obligations which pertain to any student who withdraws from the residence halls or from the College during the term.

FINANCIAL AID FOR ROOM AND BOARD

A Barnard student whose academic record and financial situation make her eligible for financial aid from the College will have the cost of room and board considered in her award if she is classified as a resident student and resides in College housing.

OFFICE OF PLACEMENT AND CAREER PLANNING

The Office of Placement and Career Planning helps students and alumnae define and implement career plans. In providing this service, the Office has developed a range of projects and activities designed to help students and alumnae explore careers and keep informed about current labor market trends.

The office is open twelve months a year and during that time has contact with hundreds of employers. Full time job listings are available at all times and can be mailed to alumnae who register with us. Credentials for employment are sent out at the request of alumnae and seniors. A great many students use part-time job listings during the school year for both on and off campus jobs. These jobs include such activities as typing, tutoring, laboratory research, and retail sales. In addition, the Barnard Babysitting Ser-

vice run by the Office receives thousands of requests annually and provides work for a large number of students. The Placement Office staff also helps students locate summer jobs throughout the country. The Federal Work-Study Program is an additional source of jobs during the school year and summer for students eligible for financial aid. A newsletter published monthly by the Office keeps students informed about jobs and other special activities.

To aid students and alumnae in exploring career areas, a library of vocational materials and a collection of catalogues from graduate schools are housed in the Placement Office. Special projects are planned during the year to further this exploration. With the Women's Center and the Preprofessional Adviser, the Office runs a series of career workshops entitled "After Barnard, What?" Other workshops on specific concerns, such as resume writing and job interviewing, are also held. There are group counseling sessions for both alumnae and students. For the past three years a major career workshop, open to the public as well as to students, has been held annually, and information on numerous career areas has been provided by women currently in the field. To enable students to "try-out" vocational interests the office staff together with The Alumnae Student Affairs Committee has established an internship program during the January semester break. Students work under the sponsorship of alumnae and others in particular career areas.

PRE-PROFESSIONAL ADVISING

Students who are interested in post-baccalaureate professional training may consult the Pre-professional Adviser in the Office of the Dean of Studies for help in programming, selection of schools, and submission of application materials. A student who plans to enter the health professions should register in her first or second college year in order to discuss requirements and obtain a handbook. Registration in the junior year is advisable for any student interested in law, social work, architecture, journalism, or business. The pre-professional secretary maintains recommendation files for registered students and forwards materials required for applications.

PRE-GRADUATE SCHOOL ADVISING

Students interested in advanced study in the liberal arts and sciences or the performing arts may consult appropriate faculty members and the Senior Class Adviser. A student who plans to apply to graduate schools should, in her senior year, establish a file with the secretary for graduate school recommendations in the Office of the Dean of Studies.

STUDENT RECORDS

The Buckley Amendment to the General Education Provisions Act stipulates that students may have access to their official files and that no transcripts may be issued without written requests. A further explanation may be found in "A Guide to Barnard College."

VII. Courses of Instruction

Course descriptions will be found in the following pages. More information may be obtained from the chairmen of the departments at registration periods and during the academic year. The College reserves the right to withdraw or modify any course or to change the instructors as may be necessary.

Room assignments are published in a separate bulletin and distributed during registration.

Autumn Term courses carry odd numbers, Spring Term courses even numbers, year courses consecutive odd and even numbers. An even number followed by \mathbf{x} indicates a course given in the Autumn Term. An odd number followed by \mathbf{y} indicates a course given in the Spring Term.

Indivisible **Barnard** courses which run throughout the year are marked with a hyphen between the numerals (Music 1-2). No credit is given for work in an indivisible course dropped at midyear without the written consent of the instructor and departmental chairman and the approval of the Committee on Programs and Academic Standing.

Divisible **Barnard** courses which run through the year are marked with a comma between the numerals (Geography 1, 2). The first half of such courses may be taken separately. Admission to the second half without completion of the first half is granted only if written permission of the instructor is obtained.

The following alphabetical prefixes designate the division of the University for whose students the course is primarily offered or indicate joint courses. Hyphens and commas between these course numbers do not necessarily have the connotations described above for Barnard courses.

C – Columbia College

F - School of General Studies

G - Graduate School of Arts and Sciences

R - Program in the Arts

 ${\sf V}-{\sf Joint}$ undergraduate course with Columbia College and/or the School of General Studies

W - Other inter-faculty course

The level of the course in general is as follows:

1000-3999 Undergraduate

4000-5999 Graduate, open to qualified undergraduates

6000-8999 Graduate, normally not open to undergraduates

The symbol x follows the number of a course given in the Autumn Term; the symbol y follows the number of a Spring Term course.

This program is supervised by the Committee on American Studies:

Professor of History

Annette K. Baxter, Chairman

Professor of Art History

Barbara Novak

Assistant Professor of History

John W. Chambers

Associate in English

R. Christine Royer

The purpose of the program is to develop understanding of American civilization considered as a whole. The results of specialized study in all fields of learning dealing with American subject matter are assembled for the work of the senior seminar.

A major in American Studies: In order to acquire a broad understanding of American civilization and acquaintance with various methods of studying it, a student who majors in American Studies must take a program, planned in consultation with her major adviser, which includes the following: (a) Two courses selected from among ancient, medieval, or European history in any combination. (b) Two courses in American history. (c) Two courses in social science dealing primarily or partly with American subject matter. (d) Two courses in humanities dealing primarily or partly with American subject matter. (e) In the junior year American Studies 2x, 1y, and in the senior year American Studies 3-4.

A research essay to be prepared in the senior seminar is required in lieu of the major examination.

2x,1y. Junior Readings.

Students will read selected classics and examples of contemporary scholarship in American Studies. The aim of the course is to prepare the student to discuss and write critically on interdisciplinary works. May be entered either semester. Open to non-majors with permission of the instructor. 2x. Professor Chambers. 1y. Professor Baxter. Tu 2:10-4.

3-4. Senior Seminar.

Individual research on diverse aspects of American civilization, in consultation with the instructor, and presentation of results in the form of the senior essay. Professor Baxter. W 2:10-4 and frequent conferences.



Ancient Studies

This program is supervised by the Committee on Ancient Studies:

Professor of Art History and Archaeology

Edith Porada (Columbia)

Professors of Greek and Latin

William M. Calder III (Columbia)

James A. Coulter (Representative for General Studies)

Professor of Philosophy

Joseph G. Brennan

Associate Professor of Greek and Latin

Lydia Lenaghan (Representative for Barnard College)

Associate Professor of History

William V. Harris (Columbia)

Associate Professor of Religion

Elaine Pagels

Assistant Professor of Middle East Languages and Cultures

Irvine D. Marcus (Representative for Columbia College)

The major in Ancient Studies is designed to allow the student to explore various aspects of antiquity while concentrating on one. By studying the ancient world in several academic disciplines she will acquire a general knowledge and a context for her own area of specialization.

Each student chooses an adviser whose field is closely related to her own and with whom she will do her senior reading, but the programs of all the students are reviewed in common by the Committee, in order to maintain control and a sense of collective enterprise.

Major requirements: nine courses, including at least four courses in one geographical area or period and at least the first semester of Ancient Studies V3998x, V3999y, *Directed Research in Ancient Studies*, with presentation of written results. In some cases, a senior seminar in one of the departments may be substituted for this course. An annual list of relevant courses compiled by the Committee is available from the Representative for Barnard College.

Ancient language courses may be used toward the major requirement; however, where a second ancient language is offered, in one of the two a second year sequence must be offered to gain credit for the first year.

Professors

Morton Klass, Abraham Rosman, Paula G. Rubel (Chairman; 411 G Milbank Hall), Joan Vincent

Assistant Professor

Clive S. Kessler

Other officers of the University offering courses listed below:

Professors

Alexander Alland Jr., Morton H. Fried, Marvin Harris, Ralph L. Holloway, Robert F. Murphy, Elliot P. Skinner

Associate Professor

Myron L. Cohen

Assistant Professors

John Attinasi, David Boyd, Daisy H. Dwyer, Richard Keatinge, Leith Mullings.

Lecturer

Robert Stigler

Anthropology is the study of the biological and cultural development of the human species, and of the contemporary variety of human societies and their cultures. The student majoring in this field will develop a perspective on humans and their ways that is not bound by her own time and culture, and she will find herself drawing upon the literature of such different disciplines as genetics, archaeology, ethnography, linguistics, and the social sciences. The flexibility of the anthropology major is such that it may form a basis for further graduate work in that field or may constitute a broad background to careers in a variety of professional fields such as law, medicine, social work, education, etc.

Every major is expected to have a general knowledge of all the fields of anthropology and of their interrelationship. Anthropology V1001, V1002 is required of all majors as a prerequisite to advanced work in the subject. In the junior year, a major will take Anthropology V3041 and 42 and in her senior year Anthropology 51-52, a seminar for independent research. All majors are required to take in addition: two courses from the following: V3002, V3011, V3012, V3027, V3042, 45; one ethnographic area course; one of the topical courses.

Several major museums and libraries in New York offer exceptional opportunities for research. Various summer schools offer opportunities for research in archaeology and ethnography, and under certain circumstances such work may be credited toward the Barnard degree. Students interested in cultural anthropology will be encouraged, whenever possible, to conduct actual research in the New York area, or, during their summer vacations, in other localities.

In lieu of a major examination, each student in the required senior seminar (51-52) will write a senior essay.

BASIC COURSES

V1001x and V1001y. Introduction to the Study of Man.

Man's biological and cultural evolution, as studied by physical anthropologists and archaeologists; introduction to anthropological linguistics. V1001x. Section I. Professor Rosman. Tu Th 9:10-10:25. Section II. Professor Fried. M W 11-12:15. Section III. Professor Alland. Tu Th 4:10-5:25. V1001y, Professor Harris. M W 11-12:15. Discussion hours to be arranged.

V1002x and V1002y. Introduction to Cultural Anthropology.

Comparative and functional analysis of culture; habitat, technology, and economy; social and political relations; ideology—magic, religion, and science; art, music, and literature; life cycles and personality. V1002x. Professor Murphy. M W 1:10-2:25. V1002y. Section I. Professor Rosman. Tu Th 9:10-10:25. Section II. Professor Fried. M W 11-12:15. Section III. Professor Rubel. Tu Th 1:10-2:25. Discussion hours to be arranged.

Linguistics V1101x or y. Introduction to Linguistics.

See Linguistics listing.

5x, 5y. Freshman Colloquium in Anthropology.

Inquiry into the purposes of anthropologists and the nature of anthropology. Specific topics to be selected by the instructor. Discussion and short papers. Limited to 20 students. Autumn Term: Professor Vincent. W 10-12. Spring Term: Professor Klass. Th 9-11.

INTERMEDIATE COURSES

V3002y. Political Anthropology.

The development and comparative study of political structure and government in non-western societies. Professor Vincent. Tu Th 10:35-11:50.

[V3003x. Problems in Developing Countries. Not given in 1976-77.]

V3004x. Introduction to Archaeology.

The history, goals, theoretical frameworks, research designs, and techniques and methods for conducting archaeological research. The relationship of archaeology to anthropology, art history, history and classics is examined. Instructor to be announced. M W 6:10-7:25.

V3005x. Peoples of Africa.

Survey of African cultures, with intensive analysis of selected peoples. Professor Skinner. M W 10:35-11:50.

[V3006y. Peoples of Southeast Asia. Not given in 1976-77.]

[V3007y. Peoples of Europe. Not given in 1976-77.]

V3008x. Ethnology of North American Indians.

Survey of tribes and culture areas of North America with intensive analysis of several ethnographies including several dealing with present-day urban adjustment. Professor Rubel, Tu Th 10:35-11:50.

[V3009x. Peoples of the Middle East. Not given in 1976-77.]

[V3010y. Native South America. Not given in 1976-77.]

V3011x. Social Organization.

The institutions and organization of social life, particularly in non-literate societies. Kinship and locality in the structuring of society. Prerequisite: an introductory anthropology course. Professor Vincent. Tu Th 9:10-10:35.

[V3012x. Economic Anthropology. Not given in 1976-77.]

V3013x. Village India.

Study of the peoples and problems of the South Asian countryside. Contemporary ethnographies and community studies will be utilized in the examination of socioeconomic relationships, religion and culture change. Professor Klass. Tu Th 2:40-3:55.

V3014y. Peoples of East Asia.

An introduction to the contemporary societies of China, Japan, and Korea, with special reference to the process of social change. Emphasis on the interconnections between local communities and the total national societies. Professor Cohen. Tu Th 10:35-11:50.

V3016y, Peoples of the Pacific.

A comparative analysis of the ethnographic setting of Polynesian, Micronesian and Melanesian populations. Emphasis on theoretical contributions achieved and current anthropological problems being considered by researchers in the area. Professor Boyd. M W 10:35-11:50.

[V3018x. The Development of Urbanism: An Archaeological Perspective.

Not given in 1976-77.]

V3021y. Sex Roles in Cross-Cultural Perspective.

A consideration of cultural expectations about male and female behavior in non-Western and Western societies. Differences in the social, economic, religious, and political behavior of men and women in a variety of cultures will be considered. Beliefs about sex and the sexes as well as the presence or absence of sex antagonisms will be examined. Professor Dwyer. Tu Th 1:10-2-25.

[V3026y. Socio-cultural Dimensions of Poverty. Not given in 1976-77.]

V3027x. Culture and the Individual.

The development of personality in varying cultural contexts: child-rearing and socialization; the role of personality theories in analyzing social systems and situations of culture change. Prerequisite: an introductory anthropology course or permission of the instructor. Professor Dwyer. Tu Th 1:10-2:25.

V3029y. The Archaeology of the New World.

A survey of the prehistoric past of native American cultures from the time of the aboriginal settling of the New World by Asian immigrants to that of European contact. Special emphasis upon the rise of the New World civilizations in Mexico and Peru and the processes leading to their development. Prerequisite: a year of introductory anthropology. Dr. Stigler. M W 1:10-2:25.

V3032x. The Archaeology of the Old World.

A survey of the principal areas of cultural development in Europe, Asia, and Africa from the earliest beginning of human culture to the dawn of the first civilization. Prerequisite: a year of introductory anthropology. Dr. Stigler. M W 1:10-2:25.

V3033x. Sociolinguistics.

Geographical and social dialects; linguistic variation in the speech community; social evaluation of linguistic features; social problems of mutual intelligibility; linguistic change in progress. Professor Attinasi. Tu Th 6:10-7:25.

V3034y. Ethnolinguistics.

Language diversity, relativity; world view and grammatical categories; processes and problems of change; language evolution. Covert classificatory systems; ethnotaxonomy; men's and women's speech; baby talk; age grading; taboos and euphemisms; secret languages and linguistic play; nature of speech events; discourse analysis. Professor Attinasi. Tu Th 6:10-7:25.

V3036x. Peasant Societies.

An introduction to pre-industrial agrarian social systems. Professor Cohen. Tu Th 10:35-11:50.

Anthropology

V3037y. Societies in Transition.

An analysis of the changes that are taking place in traditional societies in the twentieth century, with emphasis on the relation between traditional cultures and new institutions. Professor Kessler. Tu Th 4:10-5:25.

V3038x. Ethnic Relations in Changing Societies.

Analysis and comparison of ethnic relations in settings of cultural pluralism, with special reference to developing countries. Professor Vincent. Tu Th 1:10-2:25.

V3042y. The Anthropology of Religion.

Ideological systems of simple or preindustrial cultures. Relations between religion and other aspects of culture. Prerequisite: an introductory anthropology course. Professor Klass. Tu Th 2:40-3:55.

V3044y. Symbolism.

The ordering of experience through symbols in various cultures. The symbolic significance of natural anomalies, twins, the body, space, time, inversions, jokes and riddles will be examined through selected readings from Durkheim, van Gennep, Lévi-Strauss, Mary Douglas, Victor Turner, and others. Prerequisite: an introductory course or permission of the instructor, Professor Kessler. M W 2:40-3:55.

[V3048x. Laboratory Techniques in Archaeology. Not given in 1976-77.]

V3050y. Field Archaeology.

Introduction to archaeological techniques and methods of excavation. Approximately seven field sessions, supplemented by classroom work. Students must pay for their transportation and food when on the trips. Permission of the instructor required. Instructor to be announced. S 9-5.

V3100y. Urban Societies.

Evolution of cities. A cross-cultural view of kinds of urban formations. Examinations within an anthropological context of various aspects of urban life. Professor Mullings. Tu Th 2:40-3:55.

V3121x, Environment and Cultural Behavior.

Discussion of ecological studies in cultural anthropology, with special emphasis on making cultural practices intelligible by relating them to the material world in which they develop or occur. Permission of the instructor required. Mr. Boyd. MW 2:40-3:55.

[V3125y. Evolution of Subsistence Agriculture Systems. Not given in 1976-77.]

V3200y. Colloquium on Methods of Anthropological Research.

Analysis and application of various methods of anthropological research, including, among others, fieldwork procedures, the cross-cultural method, and approaches to model-building in anthropology. Prerequisite: an introductory anthropology course and permission of the instructor. Professor Rubel. W 10-12.

V3201x. Physical Anthropology.

Evolutionary theory, population genetics, race, human paleontology, and primate behavior. Professor Holloway. Tu Th 11-12:15.

[45. Theory and Results in Archaeology. Not given in 1976-77.]

FOR MAJORS ONLY

V3041x. History of Anthropological Theory.

Intellectual developments contributing to the formalization of anthropology as a discipline. The works of Montesquieu, Comte, Maine, Durkheim, and Marx will be considered, along with the theoretical writings of such anthropologists as Tylor, Morgan, Boas, Malinowski, and Radcliffe-Brown. Required of all majors in their junior year. Professor Kessler. Tu Th 4:10-5:25.

42. Junior Colloquium on Current Anthropological Theory.

Intensive analysis of selected contemporary theoretical approaches and issues in anthropology. Required of all majors in their junior year. Prerequisite: Anthropology V3041. Professor Rosman. Tu 2-4.

V3500y. Colloquium: Problems in Structuralism.

Reading and research in anthropological theories of structuralism. Review of works of Claude Lévi-Strauss, Edmund Leach and others in relation to relevant work in linguistics, psychology, sociology and philosophy. Permission of the instructor required. Professor Rosman, W 1-3.

[V3700x. Colloquium: Anthropological Research Problems in Complex Societies. Not given in 1976-77.]

[V3720. Colloquium on Marxism and Ethnography. Not given in 1976-77.]

51-52 or 52x-51y. Anthropology Senior Seminar.

Discussions and conferences on the researching and writing of the senior essay. Members of the Department. Hours to be arranged.

GRADUATE COURSES

Certain graduate courses given in the University are open to qualified majors with the consent of the department chairman and the major adviser. These courses are described in the Bulletin of the Graduate School of Arts and Sciences.



Art History

Professors

Barbara Novak (Chairman; 301B Barnard Hall), John Walsh, Jr.

Adjunct Professor

Brian O'Doherty

Associate Professor

Dorothea Nyberg

Assistant Professors

Joseph Masheck, Jane Rosenthal

Visiting Artists

Milton Resnick, Victoria Barr

Other officers of the University giving instruction in Barnard College:

Professor

Miyeko Murase

Assistant Professor

Cornelius Chang

Instructors

John W. Rainey, Ronald Williams

Other officers of the University offering courses listed below:

Professors

James Beck, Richard Brilliant, George Collins, Howard McP. Davis, Douglas Fraser, Alfred Frazer, Robert Hanning (English), Howard Hibbard, Milton Lewine, Edith Porada, David Rosand, Allen Staley

Assistant Professors

Rosemarie Bletter, Louise Bordaz, Esther Pasztory, Judith A. Schaeffer, J. Kirk T. Varnedoe

Lecturers

Christiane Andersson, Gerald Silk

Art is a unique form of human experience. A study of its history will often provide a surprisingly vivid insight into the intellectual currents, the religious doctrines and practices, and the social institutions of the past. The student will see to what extent the unfolding of art is determined by conditions existing outside it, and by the impetus given it by the great creative personalities. She will in consequence gain a deepened understanding of the art of our own time and an ability, often fully appreciated only after she has left college, to enjoy intelligently the great accumulation of art in museums all over the world.

Courses in the department of Art History are designed to take advantage of the resources of New York, one of the world's great centers of art. A limited number of studio courses are also offered at Barnard; in addition, students may take any course for which they qualify in the Department of Painting and Sculpture, School of the Arts of Columbia University. See page 53 for regulations governing these courses. Studio courses do not count towards the major.

Students who want to major in Art History must take at least nine courses in the department. They should select a full-time member of the department as their adviser, preferably during their sophomore year and not later than the beginning of their junior year. They should plan their academic program in consultation with this adviser. The

department strongly suggests that majors take Course 1, 2, and thereafter they must take at least one advanced course in ancient, medieval, renaissance, baroque, and modern art, so as to be able to appreciate the variety of artistic expression in different countries and periods. At least five courses in the major should be Barnard courses. Students may register their major as art history with emphasis on architecture. Address inquiries regarding an architectural emphasis to Professor Nyberg; address inquiries regarding an art history major to Professor Novak.

Majors are required to take at least three seminars, two at Barnard. Seniors in Art History are required to write a senior essay, which may be an expansion of a paper for any seminar. Under special circumstances and with the chairman's permission, a limited number of seniors may elect Art History 99x or y, independent research for the senior essay. Art History 99x or y may not be used to fulfill the seminar requirement, but can be taken in addition to the three required seminars.

Students planning to do graduate work should obtain a reading knowledge of at least two of the foreign languages in which the major contributions to the history of art have been made. (Most graduate schools require a reading knowledge of French and German; the department strongly recommends taking German while at Barnard.)

The Program in the Arts: Those students contemplating a career in studio art should see the announcement on the Program in the Arts, pages 56-58, and should consult with Professor Novak at the earliest possible time.

1, 2. Introduction to the History of Art.

A brief examination of the techniques of visual analysis, followed by a chronological survey of the major period styles of Western European art. Emphasis will be given to the interpretation of form and content in the works studied and to the correlation of the visual arts with their respective cultural environments. Either course may be taken separately. Autumn Term: Greek and Roman art, Medieval art. Spring Term: Renaissance to modern art. Professor Rosenthal. M W 1:10-2:25.

[31. Pre-Columbian Art. (formerly V3080). Not given in 1976-77.]

V3090y, American Indian Art.

A survey of the tribal arts of North and South America. Professor Pasztory. M W 11-12:15.

W4065y. Art of Oceania.

Form and content of the traditional arts of Indonesia, Australia, Melanesia, Micronesia, and Polynesia. Professor Fraser. W 7:10-9 p.m.

W4075x. Art of Africa.

Form and content of the traditional arts of various tribal groups south of the Sahara. Professor Fraser, W 7:10-9 p.m.

W3155x, Introduction to the Archaeology of the Near East and the Aegean.

Survey of archaeological method and examination of selected Neolithic and Bronze Age sites, Professor Bordaz, W F 1:10-2:25.

W3153y. The Neolithic in the Near East and the Aegean.

Lectures and discussion sessions focusing on theories relating to this period and on representative sites. W3155x is recommended as a prerequisite. Professor Bordaz. W F 1:10-2:25.

W3150y. Art and Architecture of the Ancient Near East.

The arts of the ancient cultures of Mesopotamia, Iran, Anatolia, Syria, and Palestine from the 4th millennium through the Achaemenid period in the late first millennium B.C. Professor Porada. Tu 5:30-8:00 p.m.

V3248x. Greek Art and Architecture.

An examination of the principal monuments and themes of Greek art in sculpture, painting, architecture, and city planning from the Mycenaeans to the Roman conquest. Professor Schaeffer. Tu Th 2:40-3:55.

V3250x. Roman Art and Architecture.

The architecture, sculpture, and painting of ancient Rome from the second century B.C. to the end of the Roman Empire in the West. Professor Frazer. Tu Th 2:40-3:55.

W4255y. Hellenistic Art.

Greek art after Lysippus to the end of the first century B.C. Development of the Hellenistic style, its regional variants, principal monuments, and major themes. Professor Brilliant. Th 2:10-4.

51. Early Christian and Early Medieval Art.

Christian art from its beginnings in the late antique world through the sixth century, followed by the early Medieval styles of northern Europe including Hiberno-Saxon, Carolingian and Ottonian art. Professor Rosenthal. Tu Th 4:10-5:25.

52. Art of the Later Middle Ages.

Architecture, sculpture, and painting in the Romanesque and Gothic periods, with emphasis on the French contributions. Professor Rosenthal. Tu Th 4:10-5:25.

61. European Architecture from the Renaissance through the Rococo Style.

The development of Renaissance, Baroque, and Rococo architecture in Italy, France, Germany, and England from the fifteenth to the mid-eighteenth century. Among the architects to be studied will be Brunelleschi, Bramante, Michelangelo, Delorme, Cortona, Borromini, Francois Mansart, Hardouin-Mansart, Inigo Jones, Wren, Neumann, and Boffrand. Professor Nyberg. M W 4:10-5:25.

[V3420y. Italian Sculpture during the Renaissance. Professor Beck. Not given in 1976-77.]

W3633y. Italian Renaissance Painting.

Painting in Italy from the revival of painting in the late thirteenth century to the early sixteenth century. Emphasis on the Early Renaissance and on a close analysis of the works of Giotto, Masaccio, and Piero della Francesca. The High Renaissance is discussed less fully, with stress on Leonardo da Vinci and Michelangelo and their role in the continuity of tradition. Professor Davis. Tu Th 11-12:15.

[Art History-Comparative Literature C3922y. Themes in the Art and Literature of the Renaissance. Professors Hanning and Rosand. Not given in 1976-77.]

C3450v. German Renaissance Art.

A survey of painting, sculpture, and graphic arts in Germany during the period 1480-1550, concentrating on Schongauer, Dürer, Grunewald, Cranach, Altdorfer, Riemenschneider, and the Vischers. Miss Andersson. Tu Th 1:10-2:25.

C3688x. Northern European Painting.

Renaissance humanism and realism, the tradition of satiric imagery and the emergence of the Baroque, particularly in Flanders and Holland, with emphasis on Jan van Eyck, Van der Weyden, Bosch, Bruegel, and Rembrandt. Professor Davis. Tu Th 11-12:15.

C3020y. Drawings and Prints.

The changing styles and functions of drawing from the 15th century to the present and the development of printmaking as an expressive medium. Emphasis on such artists as Pisanello, Leonardo, Dürer, Michelangelo, Rembrandt, Goya, and Picasso. Prerequisite: Humanities C1121 or the equivalent. Professor Rosand. M W 1:10-2:25.

[75. European Painting Since the Renaissance. Not given in 1976-77.]

76. European Painting since the Renaissance.

Painting from the late eighteenth century to 1900. Neoclassicism, Romanticism, Realism, Impressionism, and Post-Impressionism. Emphasis will be on the developments in France, from David to Cézanne and Seurat, but with attention to Goya, Constable, and Turner as well. Professor Masheck. Tu Th 11-12:15.

W4422x, Rome.

Sixteenth-century architecture, urbanization, and topography. Professor Lewine. F 10-11:50.

W4423y, Rome.

Seventeenth-century architecture, urbanization, and topography. Professor Lewine. F 10-11:50

V3500x. Seventeenth-century Art in Italy, France, and Spain.

Emphasis on the major painters: the Carracci, Caravaggio and his followers, Poussin, Claude; Velázquez. The Roman Baroque: Bernini and Borromini. Art and architecture at the court of Louis XIV: the Louvre and Versailles. Professor Hibbard. M W 2:40-3:55.

59y. Seventeenth-century Art in Northern Europe 1580-1680.

Special attention is paid to the various categories and functions of works of art; the roles of dominant figures, Rubens, Rembrandt; and relations with contemporary art elsewhere in Europe, England and Germany are treated briefly, Professor Walsh, M W 2:40-3:55.

[64. European and American Sculpture, Baroque to Modern. Not given in 1976-77.]

69. French Architecture 1500-1800.

The cohesive tradition of French architecture with major emphasis on such figures as Delorme, Salomon de Brosse, Lemercier, Mansart, Le Vau, Perrault, Hardouin-Mansart, Meissonier, Servondoni, and Soufflot, Professor Nyberg. Tu Th 2:40-3:55.

70. European and American Architecture from the Eighteenth Century to the Present.

The development of Neo-Classical architecture in the eighteenth century in Europe and its influences on American architecture; the interaction of historic styles and new structural techniques in the nineteenth century; Louis Sullivan and the development of the skyscraper; American and European architecture of the twentieth century. Professor Nyberg, Tu Th 2:40-3:55.

[83y. Art and Architecture of Great Britain and Ireland. Not given in 1976-77.]

W3600x, Nineteenth Century Art.

Painting and sculpture in Western Europe from 1789 to 1900. The Neoclassic, Romantic, Realist, Impressionist, and Post-Impressionist movements. Professor Varnadoe. M W 6:10-7:25 p.m.

[77. American Art from Colonial Times to the Armory Show. Professor Novak. Not given in 1976-77.]

W3605x. The Arts in Spain from the Golden Age to the Present. (formerly 79)

A discussion of the major figures, monuments, movements, and styles in Spanish art and architecture from c.1500 to the present. Emphasis on the distinctive Spanish nature of the arts and their relation to other aspects of the culture and history of the peninsula. Professor Collins. M W 2:40-3:55.

W4624x, American Painting from 1760-1900.

A consideration of some of the principal ideas behind the American painting tradition with special attention to varying concepts of realism and idealism and to correspondences in philosophy, science, and literature. Professor Novak. M 2:10-4.

C3681x. American Art of the Twentieth Century.

Painting and sculpture in the United States from 1900 to the present. Native traditions

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and the interrelationship between those and influences from abroad, as evidenced by the works of both individuals and groups. Professor Silk. M W 11-12:15.

C3833x. Modern Architecture.

Tendencies in twentieth-century architecture and city planning as related to other cultural developments. Origins of the modern movement in the stylistic and technological developments of the nineteenth century. Major contemporary contributions. Sign up in 815 Schermerhorn. Professor Bletter. Tu Th 12-1:15.

[V3662y. Cities and Planning. Professor Collins. Not given in 1976-77.]

73,74. Art from 1875 to 1975. (73 formerly 78)

An introduction to painting and sculpture of the twentieth century. The Autumn Term treats modern art from its origins in the late nineteenth century to World War II. The Spring Term surveys the art of the last twenty-five years, 73 or its equivalent is recommended as preparation for 74. Professor Masheck. Tu Th 1:10-2:25.

91. Arts of China. (formerly V3201)

A survey of Chinese art from Neolithic to the last dynastic period of Ch'ing, with emphasis on bronzes, Buddhist art, and great landscape painting of the Sung and later periods. Attention also to the arts of Central Asia and India as they affect the arts of China. Professor Chang. Tu Th 4:10-5:25.

92. Arts of Japan. (formerly V3203)

A survey of the development of Buddhist art and architecture in Japan as they were introduced from China, including the arts of later periods, with special emphasis on the formation of indigenous art forms such as narrative scroll-painting, decorative screens, and wood-block prints. Professor Murase. Tu Th 4:10-5:25.

SEMINARS

Seminars have limited enrollment. Students must sign up for seminars offered by Barnard at 301 Barnard Hall; for those offered by Columbia at 815 Schermerhorn.

[C3955x. Seminar in German Expressionist Film and Art. Professor Bletter. Not given in 1976-77.]

[V3668x. Seminar in Modern City Planning. Professor Collins. Not given in 1976-77.]

[C3975x. Seminar on the Bauhaus. Professor Bletter. Not given in 1976-77.]

C3960. Seminar in Renaissance Book Illustration.

Style and function in the development of woodcut book illustration from c. 1420-1530 focusing primarily on Northern centers such as Nuremberg, Basel, Mainz, and Augsberg, with consideration of early ties with Venice. Students will study originals in the Columbia University collections and the New York Public Library. Miss Andersson. Time to be announced.

V3920y. Seminar on Leonardo da Vinci.

Examination of all aspects of Leonardo's contributions. Limited to 15 students—sign-up sheet in 815 Schermerhorn. Professor Beck, Tu 2:10-4:00.

W3970y. Seminar in Art and Photography.

The history of photography, with emphasis on later 19th century and early 20th century art photographers, and on problems of the interrelation of photography and other visual arts. Limited to 15 students. Permission of the instructor required. Professor Varnadoe. M 2:10-4.

71. Seminar on Problems of Style.

After a common consideration of the nature of style, and of art historical periodization, students will present reports applying these notions to materials from the history of

design. Topics include architectural ornament, the porcelain factories of the eighteenth century, iron bridges, and early industrial design. Attention to quality of workmanship and other aesthetic judgments and to the place of such works in art history. Professor Masheck, W 10-11:50.

81, 82. The Literature of Art.

Study of the literary sources used in art historical research; artists' letters, journals and treatises (by Leonardo, Rubens, Delacroix, Van Gogh), contemporary biographies (Vasari and Van Mander), the ideas and writings of leading critics and scholars (Fromentin, Baudelaire, Ruskin, the Brothers Goncourt, Huizinga, Burckhardt, Wolfflin, Worringer, Berenson, Fry, Panofsky, Gombrich, Read, Malraux). The Autumn Term will be devoted largely to writings of the artists and their contemporary critics. The Spring Term will be devoted to theories of modern criticism and scholarship. Intended for junior majors but also open to senior majors. Professor Novak, M 10-11:50.

85. Seminar in Connoisseurship.

Factors involved in judging works of art, with emphasis on paintings and drawings: materials, deterioration, damage, restoration; attribution; replicas, copies, imitations, and fakes; questions of relative quality. Meetings at the Metropolitan Museum of Art, other museums, private collections, and dealers. Limited to 12 students. Permission of the instructor required. Professor Walsh. Tu 10-11:50.

86. Seminar in Art Criticism.

A workshop in writing criticism. Short weekly assignments on such matters as Language, Experience, Narrative, and the Object. A close examination of Process. Students will write art criticism based on their gallery visits and will refer to current and previous criticism. Professor O'Doherty. F 10-11:50.

[87. Art Between the Wars. Professor Masheck. Not given in 1976-77.]

C3666y. Architecture since 1945.

Analysis of recent architectural theory and design based upon primary source materials. Topics include the work of Frank Lloyd Wright, LeCorbusier, Aalto, Kahn, Venturi, Moore, Team 10, and such visionaries as Buckminster Fuller, Archigram, the Metabolists, Soleri, and others. Readings, class discussions, and written reports. Prerequisite: Art History C3833 or comparable course; junior standing and permission of the instructor. Professor Bletter, Tu 2:10-4.

[96. The Arts of the Rococo. Professor Nyberg. Not given in 1976-77.]

98. Social and Political Functions of Architecture.

Topics include religious architecture, funeral monuments, the architecture of kingship and of the French and American Republics. Professor Nyberg. W 10-11:50.

99x, 99y. Independent Research for Seniors.

Independent research, primarily for the senior essay, under a chosen faculty adviser and with the chairman's permission. Hours to be arranged.

STUDIO COURSES

A maximum of four courses of studio work may be credited. Columbia courses or sections which offer only 2 points do not count for Barnard credit. Students taking more than two courses of studio work are required to validate the additional credit courses in art history. Studio courses 3, 4, 5, 6, 7, 8, and 10, 12 are given at Barnard and no special permission is needed to take these courses. However, enrollment is limited and students must sign up in 301 Barnard Hall. The remainder of studio courses are given at the School of the Arts, in Dodge Hall, and students may register for these only with written permission of the departmental representative (Professor Andre Racz). Classes are limit-

ed to 18 students. Students who wish to enter the Columbia courses listed below are required to apply for space in 305 Dodge Hall during the preregistration period prior to each term. The Fall workshop courses given by the division of painting and sculpture will be rescheduled for the 1976-77 academic year; please consult the Bulletin of the School of the Arts.

3, 4. Studio Painting.

Studio course in painting with acrylic and oil. Supplementary instruction in drawing and the use of color. Emphasis is on individual development. Miss Barr. Tu Th 2-5.

5, 6, 7, 8. Advanced Painting.

A course designed to teach students basic skills by setting specific tasks to be executed in painting. Previous art training is not necessary. Limited to fifteen students. Mr. Resnick. F 1-5.

10. Architectural Graphics (Free-Hand Drawing).

Studio work in a three dimensional graphic vocabulary, with emphasis on conceptual/perceptual techniques in free-hand drawing. Special attention paid to the individual student's particular skills. Limited to 15 students. Both Course 10 and Course 12 must be taken to receive one course credit. Mr. Williams. W 1-5.

12. Architectural Graphic Techniques.

Studio introduction to a two and three dimensional graphics vocabulary with an emphasis on measured drawing techniques and scale model construction. Limited to 15 students. Both Course 10 and Course 12 must be taken to receive one course credit. Mr. Rainey. Time to be announced.

Drawing R1001x, R1002y; R1003x, R1004y. Drawing Workshop.

Model Fee: \$15 per term. Three sections. Instructors and times to be announced.

Painting R1011x, R1012y; R1013x, R1014y. Painting Workshop.

Model Fee: \$15 per term. Three sections. Instructors and times to be announced.

Printmaking R1041x, R1042y. Woodcut and Wood Engraving.

Laboratory Fee: \$25 per term. Instructor and time to be announced.

Printmaking R1043x, R1044y. Etching and Engraving.

Laboratory Fee: \$25 per term. Instructor and time to be announced.

Printmaking R1045x, R1046y. Lithography and Drawing.

Laboratory Fee: \$25 per term. Instructor and time to be announced.

Sculpture R1023x, R1024y. Sculpture Workshop.

Model Fee: \$20 per term. Two sections. Instructors and times to be announced.

Sculpture R1027x-R1028y. Welding.

Laboratory Fee: \$25 per term. Two sections. Instructors and times to be announced.

Sculpture R1029x-R1030y. Sculptural Structure and Materials.

Laboratory Fee: \$25 per term. Two sections. Instructors and times to be announced.

GRADUATE COURSES

Certain graduate courses given in the University are open to qualified majors with the consent of the chairman of the department and the major adviser. These courses are described in the Bulletin of the Graduate School of Arts and Sciences.



Program in the Arts

This program is supervised by the Committee on the Program in the Arts:

Professor of English
Barry Ulanov, Chairman

Professor of Music
Hubert Doris

Professor of Art History Barbara Novak

Professor of English (Theater)
Kenneth Janes

Associate Professor of Physical Education (Dance)
Jeanette Roosevelt, Coordinator

The Program in the Arts is offered for a limited number of students who are gifted in one of the arts and who wish both to continue the development of their skills and to obtain a liberal arts education. It is designed as an interdisciplinary major in the arts with concentration in one particular art. The program offers a general introductory course, a junior colloquium, and a senior seminar, as well as directed work in a field of concentration such as studio work in the visual arts, music as a performing art, the dance in all its aspects, theater as a performing art or as a discipline of literary scholarship, and writing in all its branches.

Students are normally admitted to the Program in the Arts in their sophomore year, but freshmen who look forward to entering this major are strongly advised to take the introductory course in their freshman year and to seek the counsel of members of the Committee in shaping their program as early as possible. Admission is based upon application to be made before March 1 of the sophomore year. Each applicant will be asked to provide supporting evidence of her individual skill. There are broad general requirements and special ones in each of the disciplines, but each student's program will be given shape with the utmost flexibility possible.

Courses offered under the sponsorship of the Committee, required of all students majoring in the Program in the Arts, are described in the section below. Requirements for the various concentrations within the Program are outlined following. A student should consult with the faculty member on the Committee who is responsible for the area in which her interest lies.

1y. Introduction to the Arts.

An interdisciplinary presentation, with special emphasis upon theories of style and performance. The interrelationship of the arts, their separate and common critical vocabularies, their borrowings from each other, their defining differences. The course stresses the phenomenon of process in the arts, observed through (1) the consideration of style in the various arts, (2) the study of a crucial period in the history of the arts, and (3) the consideration of major figures in the period, whose innovations in style or inventions in technique led to new forms of expression. Subject for 1976-77: The arts in the Middle Ages. Professors Ulanov and Doris. Dance and theater laboratory: Professors Roosevelt and Janes and theater staff. Tu Th 10:35-11:50. Lab. hours to be arranged.

51. Junior Colloquium.

A close study of critical and scholarly works in the history and traditions of the arts, selected to illuminate a particular theme each year. The aim of the colloquium is to develop skills in writing and discussion, and to equip students to deal with the special problems that accompany any examination of the arts on an interdisciplinary basis.

Theme for 1976-77: The image, Professor Doris, Th 4:10-6.

91. Senior Seminar.

Contemporary issues in the arts, with special reports and projects leading to a thesis or a performance. Participating students are encouraged to work in groups, whenever their interests coincide or the logic of performance suggests such collaboration. Theme for 1976-77: Surrealism, Professor Masheck, Tu 4:10-6.

Courses required for the Dance concentration:

Dance 61-62.

Dance Workshop

Dance 63

Form in Dance Composition Content in Dance Composition

Dance 64. Dance 65, 66,

History of Dance

Dance 74.

Seminar on Contemporary Dance Forms

Courses required for the Music concentration:

Any two of the following:

Music V3124v.

History II.

Music V3125x.

History III.

Music V3126y.

History IV.

Plus the following courses if the student is not exempted from them upon entrance into the Program:

Music V2100x-V2101y.

Theory I and II.

Music V2300x-V2301v.

Theory III and IV.

Courses required for the Theater concentration:

English 30. Introduction to the Theater (may be waived upon evidence of sufficient theater background).

English 33,34.

Play Production.

English 31 or 32.

The Contemporary Theater.

English 35 or 36. Actor's and Director's Interpretation of Dramatic Literature.

Dance Technique. One semester, (Dance composition may be substituted upon evidence of adequate prior training.)

Three courses in dramatic literature drawn from the following:

English 63 or 64. Shakespeare.

English 86.

Modern Drama.

French 34.

The French Theater of the Seventeenth Century.

Class, Lit. V3123.

Greek Drama and its Influences.

Greek V3305x.

Tragedy.

German 25.

Great German Dramatists and Theaters of the Nineteenth Century.

German 26.

The Modern German Theater.

Russian V1229x.

Russian Drama and Theater.

Courses required for the Visual Arts concentration:

Introduction to the History of Art. Art History 1, 2.

Art History 73, 74. Art from 1875 to 1975.

Art History 86.

Seminar in Art Criticism.

A minimum of four studio courses, to be selected from offerings listed in the Barnard catalogue.

Courses required for the Writing concentration:

Four courses selected from the following:
English 3, 4. Structure and Style.
English 6. Advanced Composition.
English 7, 8. Experiments in Writing.

English 11, 12. Story Writing. English 13, 14. Dramatic Writing.

English 93. Literary Analysis and Evaluation.

Plus two advanced courses from any of the college departments of language and literature.



Biological Sciences

Professors

William A. Corpe, Patricia, L. Dudley, Donald D. Ritchie (Chairman; 1205 Altschul Hall)

Associate Professor

Frederick E. Warburton

Assistant Professors

Philip V. Ammirato, Maria G. Miller

Instructor

Clifford A. Kolba

Laboratory Director

Eleanor L. Noback

Other officers of the University offering courses listed below:

Professors

Sherman Beychok, Walter J. Bock, Charles R. Cantor, Eric Holtzman, Howard Levene, Cyrus Levinthal, Frank G. Lier, Goeffrey L. Zubay

Associate Professor

Alberto L. Mancinelli

Assistant Professors

F. Carter Bancroft, Lawrence A. Chasin, James A. Lewis, Deborah B. Mowshowitz, Ronald R. Sederoff

Lecturers

Gail Arnold, Mollie N. Pflumm, Yum Keung Yip

- ¹ Absent on leave, Spring Term.
- ² Absent on leave, 1976-77.

The major program is designed to serve a variety of needs. Some students interested in general education major in biology because they desire specific knowledge of living organisms. Other students specialize in biology in anticipation of graduate work in this field, or in preparation for medical or dental school. Still others plan a career in government, educational or private research organizations, or they may wish to teach at the elementary or intermediate school level.

The sequence of courses to be followed depends on the ultimate aims of the student and is planned in consultation with members of the department. Planning of the course sequence in biology and related fields is necessary to provide a balanced program and to assure that prerequisites for advanced courses are completed in time.

Course 1-2 should be elected by those students who had a standard biology course in high school, as well as by those who have had no previous training in biology. Some courses taken outside the department may be counted toward a biology major: Biology-Chemistry C3501x, and Psychology 17. In fulfilling the major requirement, students must include at least five terms of laboratory work in biology.

If given special permission, qualified students may take courses offered in the graduate school. They should consult the Bulletin of the Graduate School of Arts and Sciences and their major advisers.

Three or four chemistry courses, chosen in consultation with an adviser, fulfill the minimum requirements in chemistry for graduate work in biology and for entrance into medical school and this amount is generally regarded as the minimum for biology majors as well. Students interested in ecology or evolution should take Geology V1021x and V1022y. A year of general physics should be taken by majors who plan on graduate

Biological Sciences

work or a career in medicine. Graduate work in biology requires a knowledge of German and French (or some other modern language). College mathematics, including calculus, is strongly recommended.

The Undergraduate Record Examination is given as the major examination, unless a student chooses to take the Graduate Record Examination instead. Students are encouraged to do summer work in biological laboratories or field stations. Assistance toward such work may be awarded to qualified students through the Edna Henry Bennett Memorial Scholarship Fund or the Herbert Maule Richards Fund.

Research projects (Biology 99x, 99y) may be selected by students desiring to do individual work. Only one term of such "special topics" can be counted toward the biology major, although more may be used as general electives. Space and equipment are made available for such projects.

Laboratory Science Requirement: The college requirement in laboratory science may be satisfied by taking Course 1-2.

1-2. General Biology.

The nature, development, and implications of biological knowledge; biochemical basis and energy relations of organisms; structure and function of cells; organization and physiology of plants and animals, with emphasis on integration and control; classical and molecular genetics; development and differentiation; evolution, ecology, and animal behavior. Professors Ammirato and Miller. Lec. M W F 9. Lab. (3 hours) Tu Th 9-11:50, M, Tu, W, Th, F 1:10-4 or 2:10-5.

C1007x. Introduction to Modern Biology.

Professors Bancroft, Macagno, and Mowshowitz. Lec. Section I. Tu Th 9-10:15. Section II. Tu Th 1-2:15. Recit. 2 hours at one of the following times: Tu 11-1, 3-5; W 11-1, 1-3; Th 11-1, 1-3.

3. The Biology of Plants.

Evolutionary, morphological, physiological, and ecological aspects of plants, with some attention to their historical, esthetic, and economic importance. Prerequisites: Biology 1-2 or equivalent and permission of the instructor. Professor Ritchie. Lec. Tu Th 9:35-11, Lab, W 1:10-5.

C1208y. Introduction to Organic and Evolutionary Biology of Animals.

Professor Bock, MWF 11.

4. Natural History of the New York Area.

Field observations of plants, fungi, birds, reptiles, amphibians, lower invertebrates and arthropods. Methods of identification, collection, preservation. Visits to a variety of ecosystems, both semi-wild and altered by man. Written permission of the instructor required. Professors Ritchie and Warburton. Field trips, laboratory, and discussions. Hours to be arranged. One course credit, part in Autumn and part in Spring Term. Does not satisfy laboratory requirement.

5. Introduction to Genetics, B.

Mendelian and quantitative genetics of plants, animals, and man: segregation, recombination, measurement of linkage, and the genetics of continuous variation. Cytogenetics. Developmental genetics. Population genetics and evolution. Human genetics will be emphasized where it exemplifies general principles. Prerequisites: a course in introductory biology; calculus or statistics, or permission of the instructor. Professor Warburton. Lec. Tu Th 11-12:15. 1 hour recitation and demonstration.

6. Evolution.

The modern theory of evolution; the genetic and ecological mechanisms which adapt organisms to their environments and increase the diversity of species. Prerequisite:

Biology 1-2 or equivalent, Professor Warburton. Lec. Tu Th 11-12:15. Conferences and museum trips (4 hours) at student's convenience.

7. Invertebrate Zoology.

The biology of invertebrate animals: Comparative fine and gross structure, development, physiology and autecology. Major emphasis on marine invertebrates. Laboratory-demonstration includes a survey of major groups and an individual project on the ultra-structure, physiology, or ecology of an invertebrate animal. Prerequisites: a year of college-level biology and permission of the instructor. A course in cell biology is recommended. Mr. Kolba. Lec. M W 11-12:15. Lab/demonstration (4 hours) W 1:10-5 or Th 2:10-6.

[8. Physiological Ecology. Not given in 1976-77.]

10x. Microbiology.

General and applied aspects of microbiology. The importance of microbes in aquatic, terrestrial, and human environments. Prerequisites: a year of college biology, general chemistry, and permission of the instructor. Professor Corpe. Lec. M W 2:10. Lab. M W 3:10-5.

12. Cytology.

The biology of cells: composition, development, and activities of cell walls, membranes, mitochondria, plastids, and chromosomes. Laboratory includes practice in fixation, sectioning. homogenization, smears, photomicrography, and specialized types of microscopy, including electron microscopy. Prerequisite: a year of biology with laboratory. Permission of the instructor required. Professor Ritchie. Lec. Tu Th 10:35-11:50. Lab.(4 hours) Tu or W 1:10-5.

16. Physiology of Multicellular Organisms.

An interpretation of vital phenomena on the organ level. Topics to be discussed include the major body systems and their functional relationships. Prerequisites: one course each in biology, physics, organic chemistry and written permission of the instructor. Instructor to be announced. Lec. M W 1:10-2. Conf. F 1:10-2. Lab. 4 hours to be arranged.

20. Seminars and Laboratory in Animal Behavior.

Overview of research methods, theoretical approaches, and current problem areas in vertebrate behavioral biology. Work includes discussion of research papers and individual projects on such topics as feeding behavior, reproductive behavior, communication, perceptual development. Prerequisites: Course 1-2 or the equivalent and permission of instructor. Professor Miller. Sem. M 2:10-4. Conf. W 2:10-4. Lab. (4 hours) as required by experiments,

24. Physiology of Development in Plants.

A study of the processes of growth, differentiation and organization in plants. Major morphogenetic events in the transition from zygote to flowering plant. Hormonal and environmental effects and mechanisms of action. Laboratory utilizes whole plant, organ and cell cultures. Prerequisites: Course 1-2 or the equivalent, one semester of organic chemistry, and written permission of the instructor. Professor Ammirato. Lec. Tu Th 1:10-2:25. Lab. Tu Th 2:30-4:30.

W3002y. Structure and Function of Animals.

Professor Bock. Lec. M W F 9. Lab. (4 hours) M 1:10-5; 6:10-10; Tu 1:10-5; W 1:10-5; Th 1:10-5; F 1:10-5.

Biological Sciences

C3014y. Topics in Plant Biology.

Professor Mancinelli, Tu Th 2:40-3:55.

W3022x. Developmental Biology.

Professor Levinthal. Tu Th 10, W 12.

C3032v. Introduction to Genetics, A.

Instructor to be announced, MW 1:10-2:25.

C3038v. Project Laboratory in Eucaryotic Genetics.

Professor Lewis, Lab. M F 1-5, plus hours to be arranged.

W3040x. Laboratory in Cell and Developmental Biology.

Dr. Arnold. Lec. Tu 12:30-1:20. Lab. Tu 2:10-6; W 3:10-7; Th 1:10-5. Additional hours to be arranged.

W3041v. Cell Biology.

Professor Holtzman, Tu Th 11-12:30.

C3044y. Project Laboratory in Cell Culture.

Professor Chasin. Lab. 8-12 hours. Tu Th 1:10-6 plus hours to be arranged.

C3064y. Introduction to Microbiology.

Professor Zubay, MW 11-12:15.

Biology-Geology W3092y. Urban Ecology.

Professors Broecker, Levinthal, Pitman, and Simpson. Tu Th 1:10-2:25.

C3094x. The Biosphere.

Professor Mancinelli, Tu Th 4:10-5:25.

W3241x. Structure and Interactions of Plant and Animal Communities.

Professor Lier, Tu Th 2:40-3:55.

Biology-Chemistry C3501x. Biochemistry I.

Professor Beychok, MW F 10. Recit. one hour to be arranged.

99x, 99y. Problems in Biology.

Independent work will be planned to suit the needs of the student after consultation with the instructors. Staff. Hours and credit by arrangement.

[G4061x. Biology of Microorganisms. Not given in 1976-77.]

[G4062y. Microbial Ecology. Not given in 1976-77.]

G4291v. Biometrics 1.

Professor Levene. Tu Th 11.

Professor

Bernice G. Segal (Chairman; 605 Altschul Hall)

Associate Professor

Oakley H. Crawford

Assistant Professors

Sally Chapman, Barry M. Jacobson

Lecturers

Grace W. King, Clara Wu

Assistants

Dorothy Bheddah, Barbara Goodstein, Olympia Jebejian, Maria Zecca

Chemistry majors seek to understand the nature of substances and their transformations. Upon graduation, some chemistry majors obtain research positions in chemical industry and medical laboratories. Others become technical writers or editors or science librarians. Many continue with graduate work in chemistry or related sciences or enter medical and other professional schools.

A student who is interested in chemistry should consult a representative of the department for advice in planning her program. In the first year she should take Courses 1 and 30 and start or continue the study of calculus. It is then possible for her to fulfill the basic requirements for the major in three years and to take advanced courses in the senior year. Students who have taken an Advanced Placement Course in secondary school may be given advanced placement and credit if they obtain a score of 4 or 5 on the examination and present evidence of satisfactory laboratory experience. A list of major requirements, several possible course sequences, and information about the major examination may be obtained from members of the department. Majors who complete a specific program receive an accrediting certificate from the American Chemical Society.

Students may also pursue a major in Biochemistry which supplements the basic courses in chemistry with courses in biology and two of the university courses in biochemistry. A list of major requirements in biochemistry may be obtained from members of the department.

The laboratories of the department are modern and well equipped both for course work and for independent projects. Experience with modern instruments begins in the first-year course. Students may undertake independent projects under the guidance of members of the department. This has been done recently during both the academic year and the summer, and some of the work has been published in chemical journals. Short projects may also be undertaken in several of the courses of the first three years.

Variable amounts of laboratory work are possible in several courses, as noted in the course listings. One four-hour laboratory per week counts as a laboratory unit; two such units count as one course credit. Chemistry majors take at least two laboratory units of advanced chemistry, either Courses 63 and 68, or Course 70.

Laboratory science requirement: Students wishing a year of chemistry only to satisfy the basic science requirement should take Courses 1 and 2.

1. General Chemistry I.

The particulate nature of matter in various states. Chemical transformations of matter, especially of ionic substances. Chemical kinetics, energetics, and equilibrium. Laboratory experience with both qualitative and quantitative techniques. Professor Segal, Dr. King, and assistants. Lec. Tu Th 9:10-10:25. Recitation and laboratory, one afternoon: M, Tu, W, Th, or F 1:10-5.

Chemistry

2. General Chemistry II.

Atomic and molecular structure. The chemistry of selected elements with particular attention to carbon. Selected topics in environmental chemistry and biochemistry. Primarily for majors in fields other than science. Prerequisite: Course 1 or permission of the instructor. Professor Crawford, Dr. King, and assistants. Lec. Tu Th 9:10-10:25. Recitation and laboratory, one afternoon: Tu or W 1:10-5.

30. Organic Chemistry I.

Atomic and molecular structure. An introduction to aliphatic and aromatic chemistry with emphasis on modern theories. Laboratory work stresses acquisition of basic techniques. Prerequisite: Course 1. Professor Jacobson and assistants. Lec. Tu Th 9:10-10:25. Laboratory, one afternoon: M, Tu, W, or Th 1:10-5. Problem section Tu 12.

31. Organic Chemistry II.

More advanced aspects of organic chemistry and an introduction to biological macro-molecules. Required for biology majors and premedical students. Prerequisite: Course 30. Professor Jacobson. M W F 10. Problem section W 12.

32. Intermediate General Chemistry.

Selected aspects of general chemistry, primarily for premedical students without the background for Chemistry 36 or V3059x. Thermochemistry, chemical equilibrium, complex ions and coordination compounds, and nuclear chemistry with applications to analytical chemistry and biochemistry. Optional parallel laboratory work: one afternoon under Chemistry 38. Prerequisite: Course 1 and Organic Chemistry I. Course 30 may be taken as a corequisite with permission of the instructor. Professor Segal. M W F 10.

33. Modern Techniques of Organic Chemistry Laboratory.

An introduction to qualitative and quantitative organic analysis and to advanced techniques, including instrumental and chromatographic methods, with a library problem and a short project. Majors must take this course, but it is not required by all medical schools. Prerequisite: Course 30. Corequisite: Course 31. Professor Jacobson and assistant. Lec. Th 1:10. Lab. two afternoons: Tu 1:10-5, Th 2:10-5, and if warranted by registration M F 1:10-5.

36. Chemical Dynamics.

An introduction to chemical kinetics, the laws of thermodynamics, and a study of ionic solutions and crystals. Required of chemistry majors and suitable also for premedical and biological science students. Prerequisites: Course 30, Calculus I and II, and preceding or parallel, Physics V1103-V1104 and Calculus III. Recommended parallel: Course 40. Professor Chapman. Lec. M W F 9. Problem section Tu 12.

38. Quantitative and Instrumental Techniques Laboratory.

Quantitative techniques in volumetric analysis, radiochemistry, spectrophotometry, and pH measurement. Biochemical applications are included and some experience with computer programming is provided. Suitable for premedical and biological science students. Prerequisite: Course V3059x or corequisite: Course 32 or 36. Professor Chapman. Lec. Th 1:10. Lab. Th 2:10-5. This course constitutes one laboratory unit.

40. Quantitative and Instrumental Techniques Laboratory.

Identical with Course 38 except that a greater variety of experiments are offered, with more individual options. Required of chemistry and biochemistry majors and suitable also for premedical and biological science students. Prerequisite: Course V3059x or corequisite: Course 32 or 36. Professor Chapman. Lec. Th 1:10. Lab. two afternoons: Tu 1:10-5 and Th 2:10-5.

V3059x. Introductory Physical Chemistry I.

Thermodynamics, the physical chemistry of solutions, chemical equilibria including acid-base equilibria, electrochemistry. Intended for majors in biochemistry and biology

and premedical students. Prerequisites: Organic Chemistry II, Calculus I and II, and Physics V1103-V1104, or the equivalents. Recommended laboratory: Course 38 or 40. Professor Chapman. M W F 11.

V3060y. Introductory Physical Chemistry II.

Kinetic theory, chemical kinetics, transport properties, surfaces, macromolecules. Prerequisite: Course V3059x or permission of the instructor. Professor Flynn, M W F 11.

61. Atomic and Molecular Structure.

An introduction to quantum chemistry and spectroscopy. Prerequisites: Course 30, Physics V1103-V1104, and Calculus III. Course 36 and Calculus IV are recommended. Professor Crawford. Lec. M W F 11. Recitation hour to be arranged.

63. Atomic and Molecular Structure.

The lectures of Course 61 plus laboratory experience with various types of spectroscopy. Prerequisites: Course 30, Physics V1103-V1104, and Calculus III. Courses 36, 40, and Calculus IV are recommended. Professor Crawford. Lec. M W F 11. Lab. W 1-5.

64. Applied Thermodynamics and Statistical Mechanics.

Thermodynamics of real gases and solutions. Phase equilibria. Kinetic theory of gases. Statistical thermodynamics, partition functions, equilibrium. Prerequisites: Course 30, 36, Physics V1103-V1104, and Calculus III. Course 61 and Calculus IV are recommended. Professor Segal. Lec. M W F 11. Problem section M 12.

68. Advanced Chemistry Laboratory.

Preparation and characterization of inorganic and organic compounds. Experiments in kinetics, spectroscopy, and electrochemistry using instrumental methods. Some experience with computer programming is provided. Prerequisite: Course 36 or V3059x and Course 40 or equivalent. Professor Crawford. Lec. M 1:10. Lab. one afternoon: M 2:10-5 or W 1:10-5. This course constitutes one laboratory unit.

70. Advanced Chemistry Laboratory.

Identical with Course 68 except that twice as many experiments are performed. Professor Crawford, Lec. M 1:10, Lab. two afternoons: M 2:10-5 and W 1:10-5.

99x, 99y. Problems in Chemistry.

Advanced individual laboratory projects for students who have completed the major requirements, Staff, Eight hours by arrangement.



Associate Professor

Jeanette Roosevelt (Program Coordinator; 207 Barnard Hall)

Assistant Professor

Sandra Genter (Workshop Director; 208 Barnard Hall)

Associate

Janet Soares

Human movement is perhaps the most ordinary aspect of life. Yet it can be the most ecstatic form of human expression, particularly through dance. Dance heightens the awareness of being and disciplines the body. Thus it complements the development of the powers of the intellect.

Through its physical education program, Barnard College offers studio classes in modern dance, ballet, tap dance, and jazz, as well as in general folk dance. There is also a body movement workshop, based upon Laban's Effort-Shape Theory, which emphasizes kinesthetic perception and range of movement possibility through the exploration and analysis of space, time, and energy.

In addition, the Barnard Dance Theatre Workshop affords skilled dancers the opportunity to perform in workshop presentations, in concerts and in programs integrated with drama productions and those of other departments in the College. It sponsors symposiums, master classes conducted by guest artists, and other special events. Interested students should confer with Professor Genter.

The Program in the Arts: Students looking toward a career in dance performance or choreography should see the announcement on the Program in the Arts on pages 56-58 and should consult with Professor Roosevelt as soon as possible.

61-62. Dance Workshop.

Studio work in advanced dance technique, including problems in movement improvisation and the study of dance style through the performance of phrases from dance repertory. Students read from assigned sources, participate in master classes, and keep a journal which is read periodically by the instructor and discussed in conference with the student. Permission of the instructor required. Professor Genter. M Tu W Th 12:10-1:25. Conference hour to be arranged.

63. Form in Dance Composition.

Study of the development of dance form through the manipulation, according to formal composition principles, of rhythm, energy and design in movement. Written permission of the instructor required. Mrs. Soares. M W 2-3, F 10-11:50.

64. Content in Dance Composition.

Research in the source materials of dance composition and exploration of their uses in choreography. Sources include gesture, movement texture, rhythmic structure, movement shape, and literary ideas. Emphasis upon unity of style in the work of each student. Prerequisite: Dance 63 or equivalent study elsewhere. Admission with approval of the instructor. Mrs. Soares. M W 2-3, F 10-11:50.

65, 66. History of Dance.

A survey of the development, history, aesthetics, and philosophy of dance. Autumn Term focuses upon dance as ritual, dance in antiquity, folk and ethnic dance forms, and dance in the theater of the East. Spring Term deals with ballet and modern dance from the Renaissance to the present time. Professor Roosevelt. Tu 6:10-8:50.

[74. Contemporary Dance Forms.

Professor Roosevelt, Professor Genter, and Mrs. Soares (coordinator). Not given in 1976-77.]

[76. Critical Writing on Dance. Not given in 1976-77.]

RELATED COURSES

Students interested in dance will find the courses given below pertinent and should consult the departmental listings for course descriptions.

English 33-34. Play Production. Professor Janes, Mr. Parichy, and Mr. Micunis.

Music 1-2. An Introduction to Music. Mr. Schubert and instructor to be announced.

Philosophy 34. Concept of Beauty. Professor Mothersill.

Program in the Arts 1y. Introduction to the Arts.

Professors Ulanov, Doris, Janes and Roosevelt.



Director of the Minor Latham Playhouse

Kenneth Janes (231 Milbank Hall), Professor of English

Assistants to the Director

Luz Castaños, Gordon Micunis, Janet Soares

The Minor Latham Playhouse is the center of activities for Barnard students interested in the theater. Majoring in various departments, the students bring to the Playhouse their special abilities and the experience of such courses as those listed below. For further information, consult Professor Janes. Students participate in the staged productions, the experimental and classic drama, dance and opera studio projects of The Barnard College Theatre Company. The Gilbert and Sullivan Society and the Spanish, French, German, Russian, and Italian clubs work in close cooperation with the theater program. The Barnard Bulletin's drama column and WKCR (the Columbia radio station) offer other opportunities to develop abilities related to the theater arts. Barnard's location in New York enables students to attend productions on and off Broadway.

The Program in the Arts: Those students contemplating a career in theater should see the announcement on the Program in the Arts, pages 56-58, and should consult with Professor Janes at the earliest possible time.

Among the courses concerned with the theater are these, described in detail in the departmental announcements.

DANCE

- 61-62. Dance Workshop. Professor Genter.
- 63. Form in Dance Composition. Mrs. Soares.
- 64. Content in Dance Composition, Mrs. Soares.
- 65, 66. History of Dance. Professor Roosevelt.

[74. Contemporary Dance Forms.

Professor Genter, Professor Roosevelt, and Mrs. Soares, Not given in 1976-77.]

[76. Critical Writing on Dance. Not given in 1976-77.]

ENGLISH

- 13, 14. Dramatic Writing. Professor Teichmann.
- 21 or 21y. The Uses of Speech. Miss Caughran.
- 23, [24]. Oral Interpretation of Literature. Miss Caughran.
- 27. Public Speaking. Professor Norman.
- 28. Persuasive Speaking. Professor Norman.
- 30. Introduction to the Theater. Professor Janes and Theater Staff.
- 31, 32. Contemporary Theater. Miss Castaños.
- 33, 34. Play Production. Professor Janes, Mr. Parichy, and Mr. Micunis.
- 35, 36. The Actor's and Director's Interpretation of Dramatic Literature.

 Professor Janes.
- 63, 64. Shakespeare. Professors Patterson and Robertson.
- 69y. Renaissance Drama. Professor Patterson.
- 86. Modern Drama. Professor Ulanov.

FRENCH

[16. Advanced Oral French. Mrs. Daly. Not given in 1976-77.]

34. The French Theater of the Seventeenth Century.

Professor Bailey.

[39. Twentieth-Century French Theater. Professor Geen. Not given in 1976-77.]

GERMAN

[15. Goethe. Professor Sakrawa, Not given in 1976-77.]

18. Schiller.

Professor Bradley.

25. Great German Dramatists and Theaters of the Nineteenth Century. Professor Sakrawa. Not given in 1976-77.]

[26. Modern German Theater. Professor Bradley. Not given in 1976-77.]

[46. German Literature in the Eighteenth Century. Professor Sakrawa. Not given in 1976-77.]

61. Colloquium. Heinrich von Kleist. Professor Bradley.

GREEK AND LATIN

Classical Literature V3123x. Greek Drama and Its Influences. Professor Bacon.

Greek V3305x. Tragedy. Professor Bacon.

[Greek V3307x. Comedy. Professor Benedict, Not given in 1976-77.]

ITALIAN

[V3642y. A Study of Contemporary Arts: The Italian Film. Professor Lorch, Not given in 1976-77,]

V3641y. The Italian Theater and its Contribution to European Theater.

Professor Lorch.

MUSIC

V1005y. The Opera. Professor Beeson.

RUSSIAN

[V1223x. Modern Slavic Drama in Translation. Not given in 1976-77.]

[V1229x. Russian Drama and Theater. Not given in 1976-77.]

SPANISH

11y.II. Don Juan: Man and Superman. Miss Castaños.

Economics

Associate Professors

Jean A. Gooch, 1 Deborah D. Milenkovitch 1

Assistant Professors

Sylvia Ann Hewlett, Cynthia B. Lloyd (Acting Chairman; 410 Lehman)

Visiting Robb Professor

John Eatwell

Adjunct Assistant Professor

William H. Janeway

Lecturer

Susan Previant Lee

Instructor

Mark R. Killingsworth

Other officers of the University offering courses listed below:

Professors

Philip D. Cagan, Ronald E. Findlay, C. Lowell Harriss, Albert G. Hart, Seymour Melman, Robert Mundell

Associate Professors

Ronald Grieson, James Nakamura, Carlos Rodriguez

Assistant Professors

James Albrecht, Guillermo Calvo, Keith Johnson, Peter Passell.

¹Absent on leave, 1976-77.

A major in economics may arrange a program, with the help of her departmental adviser, to suit her individual needs and interests. Students planning graduate study in economics are advised to take both of the intermediate theory courses and to familiarize themselves with basic skills in calculus and linear algebra. Programs can be arranged for students desiring to enter professional schools or planning to go directly into careers in business, research, government, teaching, or related fields.

The minimum program for majors in economics requires no fewer than 8 courses in economics from the Department's listed offerings. These courses shall include Courses 1 and 2; 27 or 28; 17; and a course in a field other than quantitative economics or economic theory for which Courses 1 and 2 are prerequisites. Although not required, it is strongly recommended that students take both courses 27 and 28.

Each senior major is required to take two semesters of the Senior Research Seminar, 61-62 or 62-61, in which the student will write a major research paper.

GENERAL COURSES. Courses listed under this heading may be taken without previous study of economics.

1x or 1y. Introduction to Economics.

An introduction to basic concepts of economic analysis, with emphasis on the aggregate economy. Subjects covered include the essentials of supply and demand, national income and its determination, United States economic institutions, government finance and monetary economics, economic growth and inequality. Members of the Department. 1x. Section I. M W F 10. Section II. M W F 11. Section III. Tu Th 10:35-11:50. 1y. Section I. Tu Th 9:10-10:25. Section II. Tu Th 10:35-11:50.

2x or 2y. Introduction to Economics.

An introduction to basic concepts of economic analysis, with emphasis on resource allocation. Subjects covered include the determination of price and income distribution through supply and demand, market structures, international economics, problems of developing nations, and alternative economic systems. Economics 1 is not a prerequisite for Economics 2. Members of the Department. 2x. Section I. Tu Th 9:10-10:25. Section II. Tu Th 10:35-11:50. 2y. Section I. M W F 10. Section III. M W F 11. Section III. Tu Th 10:35-11:50.

7. United States Economic History.

The causes of economic growth in the United States between the Colonial period and the Civil War. Focus on the reinterpretation of American history by new economic historians and the recent controversies over slavery and the ante-bellum southern economy. Limited to 20 students in each section. Dr. Lee. Section I. M 2:10-4. Section II. W 2:10-4.

8. United States Economic History.

The development of the American economy from the Civil War to the present time. Emphasis on the Great Depression vis-à-vis the current economic predicament and the debate over growth or no-growth policies. Limited to 20 students in each section. Dr. Lee. Section I. M 2:10-4. Section II. W 2:10-4.

CONTEMPORARY PROBLEMS COURSES.

The analysis of contemporary problems using institutional and traditional approaches. Prerequisite: one course in economics or sophomore standing.

10. Sex, Discrimination, and the Division of Labor.

Topics include women's non-market time, the economics of marriage and divorce, women's labor force participation and occupational choice, theories of discrimination, wage and unemployment differentials, the effect of government policy on women's position and some international comparisons. Professor Lloyd. Tu 2:10-4.

[23. Inflation and Depression: Causes and Consequences. Not given in 1976-77.]

25. 26. Contemporary Economic Issues.

A survey of leading economic issues in present-day American life, including international as well as domestic questions. Either term may be taken separately. Specific topics will vary from year to year. Topics for 1976-77 will be:

25. The World Economy.

The impact of multinationals, commodity cartels and international financial institutions in the 1970s. Permission of the instructor required. Professor Janeway. W 4:10-6.

26. Capitalism in the Modern World.

The organization of production under contemporary capitalism and the resulting class structure. Contemporary mainstream economic analysis is contrasted with that of the institutionalists, traditional Marxists, and current radical schools of thought. Instructor to be announced. W 4:10-6.

SPECIALIZED COURSES

16x. Government Finance and Fiscal Policy.

Principles of government expenditure and taxation, and the American systems of spending and taxing. Government debt; government finance in relation to the distribution of national income and wealth and to economic growth and stability; and the financial problems of state and city governments. Prerequisite: Courses 1 and 2 or permission of the instructor. Instructor to be announced. M W 1:10-2:25.

17, 18. Introductory Statistics.

An introduction to statistical methods with applications to economics. Autumn Term: Topics include descriptive statistics; basic probability theory; estimation; hypotheses testing; and simple linear regression and correlation analysis. Spring Term: Topics include index numbers; time series, multiple and partial correlation and regression analysis; and other techniques used in the social sciences. Prerequisite: Economics 17. Mr. Killingsworth. Lec. Tu Th 1:10-2:25. Lab (2 hours) Tu 4:10-6 or W 2:10-4.

19. Labor Economics.

Factors affecting the allocation and remuneration of labor. Topics include population structure; unionization and monopoly; education and manpower training; mobility and information; sex and race discrimination; unemployment; and public policy; Prerequisite: Courses 1 and 2 or the equivalent, Professor Lloyd, MW 11-12:15.

[20. International Economics. Not given in 1976-77.]

21. Theory of Effective Demand.

The theory of effective demand as an integral part of the theory of the capitalist economy. Relation between the theory of Value and the theory of Output. The contributions of Keynes, Kalecki, Malthus, Ricardo, Marx, and Wicksell. Limited to 25 students. Permission of Department required. Prerequisites or corequisites: Courses 27 and 28. Professor Eatwell. Tu 4:10-6.

[22. The Economics of Population. Professor Lloyd, Not given in 1976-77.]

27. Intermediate Macroeconomic Theory.

Classical, Keynesian, and Marxian analyses of the aggregate economy. Particular attention will be paid to modern theories of inflation, unemployment and of economic growth. All theoretical discussion will be related to the problems of the contemporary American economy. Prerequisite: Courses 1 and 2. Mr. Killingsworth. Tu Th 9:10-10:25.

28. Intermediate Microeconomic Theory.

The behavior of markets, theories of production and cost, the pricing of goods and services under alternative market structures, implications of individual decision-making for consumer demand and labor supply, income distribution, and welfare and public policy. Particular emphasis will be given to problem-solving. Prerequisite: Courses 1 and 2. Professor Lloyd, M W 11-12:15.

29. The Economics of Underdeveloped Areas.

A critique of the theories of economic growth which will include dual economy models, historical stage theories, and balanced versus unbalanced growth. Brazil, India, China, Peru, and Cuba will be used to illustrate differing strategies and degrees of success in the development process. Prerequisite: Courses 1 and 2 or permission of the instructor. Professor Hewlett. Tu Th 10:35-11:50.

[30x. Comparative Economic Systems. Professor Milenkovitch. Not given in 1976-77.]

[31y. The Development of Economic Thought, 1770-1970. Professor Hewlett. Not given in 1976-77.]

61, 62. Senior Research Seminar.

Discussions and conferences on the researching and writing of the senior essay. Section I. Mr. Killingsworth. Section II. Professor Hewlett. Section III. Professor Lloyd. Section IV. Professor Lloyd. Section V. Instructor to be announced.

W1413x. Introduction to Quantitative Economics.

The development of fundamental mathematical concepts and techniques applicable to economics and business. An introduction to differential calculus and elementary linear algebra, with an emphasis on their use in micro- and macro-economic theory.

Prerequisite: Courses 1 and 2 or permission of the instructor. Professor Calvo. M W 4:10-5:25.

W3228x. The Urban Economy.

Past and present economic functions of cities. Growth of metropolitan areas. Location theory; theories of site rent and urban form; analysis of the urban economic base. Impact of changing technology and social structure on central cities and suburbs. Problems of older central cities, including transportation, public finance, housing, and urban renewal. Effects of federal policy. The future of the city. Prerequisite: Courses 1 and 2 or permission of the instructor. Professor Grieson. M W 4:10-5:25.

W3251y. Industrial Organization.

Organization and structure of American industries and their markets. Competitive behavior, pricing policies, and market performance. Antitrust policy and leading antitrust cases. Prerequisite: Courses 1 and 2 or permission of the instructor. Instructor to be announced. M W 1:10-2:25.

W3257x. The War Economy.

The microeconomics and macroeconomics of military industry and its government management. Consequences for civilian industry and economy. Conditions of conversion from military to civilian economy. Prerequisite: Course 1 or the equivalent. Professor Melman, M 2:10-4, W 2:10-3.

W3271x. Economic Systems and Societal Patterns.

Historical and comparative study of the relations between economic systems and social and political structures with special emphasis on the sources and consequences of inequality in power, wealth, and status. Prerequisite: senior standing or permission of the instructor. Professor Findlay. Tu Th 4:10-5:25.

W3313y. Economic History of the United States.

Economic development of the United States with special attention to the forces and factors responsible for economic growth. Prerequisite: Courses 1 and 2 or the equivalent. Professor Passell. Tu Th 4:10-5:25.

W3321x. Economic Development.

The economics of underdevelopment: theories of economic growth; capital accumulation, labor flows, and technological change; roles of agricultural sector, government, and foreign trade and aid. Prerequisite: Courses 1 and 2 or the equivalent. Professor Nakamura, Tu Th 7:40-8:55.

W3411x. Labor Economics.

The labor force and labor markets; education and manpower training; unions and collective bargaining; mobility and immobility; sex and race discrimination; unemployment. Prerequisite: Courses 1 and 2 or permission of the instructor. Professor Albrecht. Tu Th 6:10-7:25.

[W3412y. Econometrics. Professor Taylor. Not given in 1976-77.]

W3414y. Introduction to Mathematical Economics.

The application of mathematical techniques to economic analysis. The theory of the firm and competition; theory of demand; static macro-economic models. Mathematical tools are developed as needed. Prerequisite: Courses 1 and 2 and permission of the instructor. Some knowledge of calculus is recommended. Professor Calvo. M W 4:10-5:25.

W3711x or y. Monetary Economics and Policy.

The nature of money and the U.S. monetary system. Monetary theory; monetary policy and how it affects the economy; current problems in the control of inflation. Prerequisite: Courses 1 and 2 or the equivalent. Recommended preparation: Course 27. W3711x. Professor Johnson. M W 7:40-8:55. W3711y. Professor Cagan. Tu Th 11-12:15.

W3861x. Taxation and Government Expenditures.

Theory and practice of government spending: principles of taxation, individual and corporation income, property, commodity and general sales, death and payroll taxation; shifting and incidence; administration. Prerequisite: Courses 1 and 2. Not open to students who have taken Economics 16. Professor Harriss. M W 11-12:15.

W3862y. Government Budgeting, Public Debt, Intergovernmental Financial Relations, and Fiscal Policy.

Budgeting and problems of efficiency in governmental spending; intergovernmental financial relations; borrowing, debt management, and fiscal policy for economic stabilization and growth. Prerequisite: Courses 1 and 2. Not open to students who have taken Economics 16. Professor Harriss. M W 11-12:15.

W3904x or y. International Economics.

The theory of international trade: comparative advantage and the factor-endowments explanation of trade; analysis of the theory and practice of commercial policy; economic integration. The balance of payments; adjustment in response to disequilibria; the foreign exchange market; alternative monetary systems. Proposals for reform of the international monetary system. Prerequisite: Courses 1 and 2. W3904x. Professor Rodriguez. Tu Th 4:10-5:25, W3904y. Professor Mundell, M W 11.

Economics-Philosophy C3910x. Seminar in Marxism.

A critical study of classical and contemporary Marxist writings on social philosophy and political economy. Permission of the instructors required. Professors Erlich and Morgenbesser. Hours to be arranged.

W4328y. The Theory of Economic Development.

The theory and practice of economic planning in the underdeveloped world. Topics covered will include: resource mobilization and foreign aid; capital movements; and industrialization strategies. The approach will be critical and every effort will be used to link the theory to contemporary case examples. Professor Hewlett. Tu Th 2-3.

W4420x. Value Theory.

The logical structure of classical and neoclassical theories of value. Identification of assumptions underlying neoclassical theory and assessment of their significance. The role of the labor theory of value in classical and Marxian Value Theories. Prerequisite: Course 28. Professor Eatwell. Tu Th 2-3.



The following program is directed by the Education Program staff:

Assistant Professor of Psychology and Education

Susan Riemer Sacks (Chairman; 336B Milbank Hall)

Associates in Education

Giselle Harrington, Katherine E. Wilcox

This program is supervised by the Committee on Education:

President, ex officio

Jacquelyn Anderson Mattfeld

Professor of English

Richard Norman

Professor of History, Teachers College, Columbia University

Trygve Tholfsen

Professor of Mathematics

Joan S. Birman

Associate Dean of Columbia College

Michael Rosenthal

Assistant Dean of Columbia University School of General Studies

Joseph Kissane

Assistant Professor of History

John Chambers

Assistant Professor of Psychology

George Kelling

Instructor in French

Simone O. Daly

The Education Program prepares students, Barnard, Columbia, and General Studies, to teach in elementary or secondary schools. The Program does not constitute a major; it is taken in conjunction with a major in some other subject.

Persons completing the program are eligible for a New York State Provisional License, valid for five years. A student wishing to teach at the *secondary* level (grades 7-12) must complete: one psychology course (Psychology 27, 29, 30, 34x); one foundations course (History 65, Philosophy 84, or Sociology V3225x); and one methods course in the student's specific subject area, taken during the junior year. A student preparing for the *elementary* level (grades n-6) must complete: Education 2 in the Spring Term of the junior year and three other courses, one in psychology (Psychology 27, 29, 30, 34x); one foundations course (History 65, Philosophy 84, or Sociology V3225x); and a third course from psychology or foundations.

All students in the Education Program student teach *one semester* during their senior year. During the student teaching semester only, the students must attend the teaching seminar which focuses on the principles and practices of classroom teaching. Student teaching and the seminar should be registered for as Education 3 and 4x in the Autumn Term or Education 3y and 4 in the Spring Term. No more than two other courses should be taken concurrently with student teaching and the seminar.

In the sophomore year, interested students should confer with the Education Program staff. Juniors who wish to apply for admission to the program should file applications, obtainable in the Education Program office (336 Milbank Hall), at the beginning of the Autumn Term. Those students who have been admitted to the program are notified by the first day of the Spring Term of the junior year.

Education 2. Approaches to Teaching Reading and Mathematics.

The appropriateness of different methods of teaching reading and mathematics is examined through the integrated experience of working with children in an elementary school and the weekly Barnard seminar. Students serve an internship one morning a week in elementary classrooms. This course should be taken in the Spring Term of the junior year. Prerequisite: Application to the Education Program and permission of instructor. The course is a prerequisite to student teaching in the elementary grades. Mrs. Wilcox, Tu 2:10-4.

Education 3 or 3y. Teaching in the Elementary or Secondary Schools.

Student teaching involves observation and teaching in elementary or secondary schools. Student teaching is done for one semester of the senior year, five mornings per week. Education 3 and 4 must be taken concurrently and are required for teaching certification. Requisite: Admission to Education Program. Professor Sacks, and Associates Harrington and Wilcox.

Education 4x or 4. Seminar in Student Teaching.

The seminar accompanying student teaching provides guidelines for teaching reading and subject areas and workshop experiences related to the learning situations. Teaching skills are developed through individual supervision and conferences. Requisite: Admission to Education Program. Professor Sacks, and Associates Harrington and Wilcox, M 2:10-4.

[History 65. History of Education in the United States. Not given in 1976-77. For certification students may take W3051x.]

Philosophy 84. Philosophy of Education.

Philosophical presuppositions of intellectual and moral education. Examination of topics such as innate ideas; natural moral characteristics; permissiveness; "free" schooling; "deschooling"; material and moral incentives. Readings will include selections from Plato, Rousseau, Piaget, Dewey, Chomsky, Illich, Neil, and current periodical literature. Not open to freshmen. Professor O'Neill. M W F 1:10.

Sociology V3225x. Sociology of Education.

The social organization of education in the United States, with emphasis upon primary and secondary schools. Topics include: The school as a complex organization; the classroom as a learning environment; social factors in academic aspirations and achievement; selected innovations in educational practices; and problems in the relations between the school and the community. Dr. Friedman. Tu Th 2:40-3:55.

English 92. Seminar in the Teaching of English.

Primarily for junior students in the Education Program. Miss Caughran. W 2:10-4.

French-Spanish 90: Problems in the Teaching of French and Spanish.

A methods course designed to train future teachers in theories and techniques of language teaching. Emphasis on teaching of conversation, grammar, literature, translation, and lesson organization. Students will actively practice and demonstrate techniques. Video-taping of some sessions for auto-criticism. Primarily for sophomores and juniors in the Education Program. Others by permission. Mr. Crapotta and Mrs. Daly. T 12:10-1, Th 12:10-2. (Offered in alternate years.)

[History 63y. Problems in the Teaching of History. Not given in 1976-77. For certification juniors should take T W 3640 at Teachers College.]

Professors

Kenneth H. Janes (Director of Minor Latham Playhouse), Ruth M. Kivette (Departmental Representative, Spring Term; 408A Barnard Hall), Richard A. Norman, Remington Patterson (Chairman, Spring Term; 408B Barnard Hall), David A. Robertson Jr. (Acting Chairman, Autumn Term; 408C Barnard Hall), Eleanor M. Tilton, Barry Ulanov¹

Adjunct Professor

Howard M. Teichmann

Associate Professors

Joann Ryan Morse² (Departmental Representative, Autumn Term; 401B Barnard Hall), Anne Lake Prescott (Director of English A; 401C Barnard Hall), Catharine R. Stimpson

Adjunct Associate Professors

Joy Chute, Elizabeth Hardwick

Assistant Professors

Elizabeth Dalton, Maire J. Kurrik, Janice Farrar Thaddeus

Associates

Elizabeth Caughran, Marjorie Housepian Dobkin, R. Christine Royer, Quandra Stadler

Instructors

Constance Colby, William Irvin

Assistant

Margaret D. Hance

¹Absent on leave, Autumn Term.

²Absent on leave, Spring Term.

The offering in English is designed to foster good writing, effective speaking, and heightened understanding of literary works that enrich our cultural heritage.

Students majoring in English are encouraged to develop their responsiveness to the literary imagination and their sensitivity to literary form through disciplined attention to language and to critical and scholarly methods. A major program consists of at least ten courses planned in sequence:

- 1. In the sophomore or junior year, the student will complete three required courses: an introduction to the methods of literary analysis (93 or 93y), and an introduction to literary works of the Renaissance and the Enlightenment (59-60).
- 2. In addition, she will elect five advanced courses so distributed as to extend her knowledge of English and American literature of different periods. Normally, she will choose these five from courses 53-58 and 63-90. She may select two of the five from courses 3-36.
- 3. As a senior, she will complete advanced work in two seminars. In the first (97), she will examine a range of works on the basis of literary theory. In the second (98), working in a period with which she is already familiar, she will write an independent essay. For this essay, a student with a particular interest in writing, speech, or theater may substitute an independent project in an advanced course in her special field. A student who wishes to write two independent essays may substitute course 99 for 97.

Program in the Arts: Students interested in this Program should see the announcement on pages 56-58, and should consult with Professor Ulanov or Professor Janes.

INTRODUCTORY

A. Freshman Studies in English.

An approach to literary skills through intensive reading, regular assignments in composition, and discussion; frequent individual conferences with the instructor. Topics of sections include The American Identity, The Significance of the Past, The Modern Tradition, and Literary Genres. Prescribed for all freshmen. Professor Prescott and Members of the Department. Sections of Course A meet at the following hours: M W F 9, 10, 11, 12:10, 1:10, 2:10. Tu Th 9:10-10:25, 10:35-11:50, 1:10-2:25, 2:40-3:55.

2x, 2. Special Seminar in Reading and Writing.

For students who want additional work in writing. Frequent conferences. Supplementary work will be provided for students whose first language is not English. Permission of the instructor required. Mrs. Colby. M W 2:10-3.

WRITING

Registration in each course is limited and the written permission of the instructor is required; signed departmental registration blanks are to be filed with Professor Morse (401B Barnard Hall). Two writing courses may not be taken concurrently. A major with a special interest in writing who has had two writing courses may substitute a third writing course for either course 97 or 98 in her senior year. She will undertake an independent project in the selected writing course.

3,4. Structure and Style.

English composition above the first-year level. Frequent individual conferences. Students may take either term or both.

I. Fiction and Personal Narrative.

Work primarily on short stories and on autobiographical writing. Minimum of forty pages of writing required each term. Professor Dalton. M 2:10-4.

II. (Autumn Term). Exposition.

Techniques of argument and effective expression. Each student will submit a weekly paper for class discussion. Mr. Irvin. W 2:10-4.

III. (Spring Term). Poetry.

Each student will submit a poem a week, to be discussed in class. Additional reading and writing assignments from time to time. Professor Thaddeus. W 2:10-4.

5, 6. The Craft of Writing: Fiction and Non-Fiction.

Each student will keep a writer's notebook to develop the habit of writing regularly, to sharpen observation, and to stimulate recall or imagination; she will expand and shape selected materials into finished works. Mrs. Dobkin. Th 4:10-6.

7, 8. Experiments in Writing.

Advanced work in various forms. Individual conferences with the instructor. Professor Hardwick, Th 2:10-4.

11, 12. Story Writing.

Advanced work in writing, with emphasis on the short story. Individual conferences with the instructor. Some experience in the writing of fiction is prerequisite to this course. Professor Chute. Tu 4:10-5:05.

13, 14. Dramatic Writing.

The development of a dramatic situation in terms of short fiction, the theater, television, motion pictures, and radio. Completed works are discussed, given dramatic readings by the class, and recorded on tape. Professor Teichmann. Tu Th 2:40-3:55.

SPEECH

To elect any course in speech a student must secure the written permission of Professor Norman or Miss Caughran. A major with a special interest in speech who has had two

speech courses may substitute a third speech course for either course 97 or course 98 in her senior year. She will undertake an independent project in the selected speech course. Her work should include course 21 or 21y and courses in public speaking and oral interpretation.

21 or 21y. The Uses of Speech.

Training in voice production and clear articulation. Designed to improve the student's speech through drill, practice in reading aloud, the presentation of oral reports, and extemporaneous speaking. Use of the language laboratory. Registration limited to 15 students. Miss Caughran. Tu Th 2:40-3:55.

[22. American and British Dialects.

Miss Caughran. Not given in 1976-77.]

23, [24]. Oral Interpretation of Literature.

Study of literary texts for oral performance. Fictive prose and poetry, with class projects exploring reading modes from informal presentation to reader's theater. Autumn Term: Miss Caughran. Tu Th 10:35-11:50.

27. Public Speaking.

Study of basic principles of informal and formal speaking with emphasis on the selection and organization of materials, on audience psychology, and on effectiveness of delivery. Professor Norman. Tu Th 10:35-11:50.

28. Persuasive Speaking.

Theory and practice of persuasive speaking: the use of evidence and opinion, logic, and audience motivation in the presentation of controversial views and current issues. Professor Norman. Tu Th 10:35-11:50.

THEATER

To elect any course in theater (except course 30) a student must secure the written permission of the instructor. Majors with a special interest in theater should consult with a faculty member of the theater staff concerning courses in theater. A major who has had at least one course in speech and two in theater may substitute a course in theater for either course 97 or course 98. She will undertake an independent project in the selected theater course.

30. Introduction to the Theater.

A survey of historic and modern theater with emphasis upon the origins of theater, the nature of the dramatic act, and the place of theater in society. Special attention is paid to the interrelation of dramatic literature, styles of production, and the organization of theater. Individual and group projects in related research. Class attendance at professional theater productions. Professor Janes and Theater Staff. W 2:10-4.

31, 32. The Contemporary Theater.

A study of the major developments in the contemporary theater, especially the nature and treatment of the text, the actor's art, and the function of the director. The course will include acting and directing projects by class members. Permission of the instructor required. Miss Castaños. M 2:10-4. Lab. hours to be arranged.

33, 34. Play Production.

A study of the technical aspects of the theater and the ways in which they complement the work of the playwright, director, choreographer, and actor. Guest lecturers in specialized areas from the professional theater. Permission of the instructor required. Professor Janes, Mr. Parichy, and Mr. Micunis. Tu Th 2:40-3:55.

35, 36. Actor's and Director's Interpretation of Dramatic Literature.

The practical study of Renaissance and Restoration dramatic literature for actors and directors. Permission of instructor required. Professor Janes. F 2:10-4. Lab. hours to be arranged.

LANGUAGE AND LITERATURE

40x, 40. Seminars on Special Themes.

Permission of the instructor required.

40x. (Autumn Term)

[1. Ulysses and Its Background.

Professor Morse. Not given in 1976-77.]

[II. The City in Literature.

Professor Stimpson. Not given in 1976-77.]

VI. Explorations of Black Literature.

A study of black expression in America; slave narratives, folklore, and song; works by Chesnutt, Du Bois, and others. Mrs. Stadler. Tu Th 10:35-11:50.

40. (Spring Term)

III. Psychoanalytic Approaches to Literature.

Study of literary expression in the light of psychoanalytic thought; reading in Freud and other psychoanalytic writers, Shakespeare, Keats, James, Kafka, Lawrence, Dostoevsky, and others. Professor Dalton. M W F 1:10.

IV. The Supernatural in Literature.

Spectres from classical times to the present, with emphasis on ghost stories of the last three centuries. Authors include Defoe, Poe, Dickens, Kipling, and James. Professor Prescott, M W F 1:10.

V. Sexuality in Literature.

Sexual roles and the place of woman as represented in the Bible and in works by Shakespeare, Jane Austen, D. H. Lawrence, Doris Lessing, and others. Professor Stimpson. M W F 11.

41, 42. Major English Texts.

A general view of the variety of English literature through study of selected writers and their works. Autumn Term: Chaucer through Milton. Spring Term: Dryden to the beginning of the twentieth century. Miss Royer. M W F 1:10.

53. Anglo-Saxon.

An introduction to the language, with selected readings in prose and verse. Professor Norman, M W F 10.

[55. Chaucer.

Not given in 1976-77. Students may take English C3334y: **The Canterbury Tales**. Professor Sundwall, M W F 2:10.]

[58. Medieval Literature.

Professor Ulanov. Not given in 1976-77.]

59-60. The English Colloquium.

Major writers and literary works of the Renaissance and the Enlightenment, examined in terms of leading ideas in those periods. Required of majors in the sophomore or junior year; open to nonmajors if numbers permit.

I. Reason and Revelation

Humanism, reformation, and revolution: the limits of human knowledge; the problem of evil; visions of perfection; skepticism and affirmation. Autumn Term: Professor Kivette. Spring Term: Professor Kurrik, W 2:10-4.

II. Imitation and Creation.

New ideas of the mind's relation to the world. New perspectives, the emergence of new forms, experimentation with old forms, and the search for an appropriate style. Professors Prescott and Dalton. W 4:10-6.

III. Ideas of Order and Disorder.

Form and structure achieved or defeated in the work of art and in the world. The rise of the man of letters and vernacular literature, The drama of self-transformation. Autumn Term: Professor Morse, Spring Term: Professor Ulanov, Th 4:10-6.

63, 64. Shakespeare.

A critical and historical introduction to the comedies, histories, and tragedies of Shake-speare. Autumn Term: Professor Robertson. Spring Term: Professor Patterson. M W F 11.

65. Humanism and the Elizabethan Renaissance.

Continuities, recoveries, and innovations from Skelton and More to Sidney and Spenser; the Reformation, Neoplatonism, courtly and popular wit. Professor Prescott. M W F 1:10.

66. Seventeenth-Century Prose and Poetry.

Classical traditions, Christian beliefs, the new science and the literary imagination: thought and style in English literature from Bacon, Donne, and Jonson to Marvell, Bunyan, and Dryden, Professor Kivette, MWF 10.

67. Milton.

A close reading and critical study of *Paradise Lost, Paradise Regained*, and *Samson Agonistes*, with some attention to minor poems and prose. Professor Kivette. M W F 10.

69v. Renaissance Drama.

Major plays of the English Renaissance from the Tudor interlude to the closing of the theaters, with emphasis on Marlowe, Jonson, and Webster. Professor Patterson. Tu Th 10:35-11:50.

71y. The Novel.

The central English tradition, including works by Defoe, Richardson, Fielding, Sterne, Austen, Bronte, George Eliot, Hardy, and Dickens. Professor Kurrik. M W F 12:10.

73. Eighteenth-Century Literature, 1660-1738.

The assumptions and techniques of satire: readings in Dryden, Pope, Swift, and Gay, with some attention to Addison, Defoe, and others. Professor Thaddeus. M W F 10.

[74. Eighteenth-Century Literature, 1738-1800. Professor Thaddeus. Not given in 1976-77.]

76x. Prose and Poetry of the English Romantics.

The thought and style of Blake, Wordsworth, Coleridge, Hazlitt, Lamb, De Quincey, Byron, Keats, and Shelley. Professor Tilton. Tu Th 9:10-10:25.

77. The Victorian Age in Literature.

Prose and verse on problems of society and religion: Carlyle, Mill, Ruskin, Arnold, Newman, Huxley, Tennyson, Browning. Professor Robertson. Tu Th 10:35-11:50.

78. Victorian Poetry and Criticism.

Poems by Tennyson, Browning, Arnold, Rossetti, Meredith, Morris, and Swinburne; some paintings by the Pre-Raphaelites and others; critical opinions of Ruskin, Arnold, Pater, and Wilde. Professor Robertson. Tu Th 10:35-11:50.

79. American Literature, 1630-1865.

The Puritan background, the Revolutionary period, and the major American Romantics: Hawthorne, Poe, Melville, Emerson and the Transcendentalists. Whitman. Mr. Irvin. M W F 11.

80. American Literature, 1865-1950.

The experimenters in prose and poetry from James to 1950. Mr. Irvin. MWF 11.

- [83. Modern Literature and the Allied Arts. Professor Ulanov. Not given in 1976-77.]
- [85. Modern British and American Poetry. Professor Ulanov., Not given in 1976-77.]

86. Modern Drama.

The modern theater and its makers from Ibsen to the present; its Renaissance and eighteenth-century antecedents. Professor Ulanov. Tu Th 2:40-3:55.

87y, Major American Writers and Their Foreign Counterparts.

The study of selected American, European, and English works of prose and poetry, 1830-1930. Professor Tilton. Tu Th 9:10-10:25.

[88. The Modern Novel. Professor Morse. Not given in 1976-77.]

89. British and American Literature since the Second World War.

A study of English and American writers since 1945 concentrating on works by writers who challenge political conventions and literary traditions. Reading to include Beckett, Burroughs, Doris Lessing, Mailer, Nabokov. Professor Stimpson. M W F 11.

90. The English Language: History and Use.

An introduction to the history of words, pronunciation, and structure in the light of literary tradition and linguistic science. Professor Norman. M W F 10.

92. Seminar in the Teaching of English.

The place of English in the curriculum and the role of the English teacher: grammar, composition, literature, testing, and grading. Primarily for students in the Education Program. Permission of the instructor required. Miss Caughran. W 2:10-4.

93 (or 93y). Literary Analysis and Evaluation.

The purpose of the course is to provide experience in the reading of literary texts and some knowledge of conspicuous works of literary criticism. Frequent short papers. Registration in each section is limited. Students must file departmental registration forms with Professor Kurrik (422 Barnard Hall) before completing their programs.

All English majors are required to take Course 93 (or 93y) before the end of the junior year. Sophomores are encouraged to take it in the Spring Term before they officially declare their major. Transfer students should plan to take 93 in the Autumn Term.

Professors Dalton, Kivette, Kurrik, Prescott, Stimpson, and Tilton. Section I. M 2:10-4. Section II. Tu 2:10-4 (Autumn Term). W 2:10-4 (Spring Term). Section III. W 4:10-6.

97. Senior Seminar: Studies in Literature (Autumn Term).

These seminars offer advanced study of genres and of literary theories not dealt with in other courses. Discussion, reports, and short papers. Open to non-majors. Written permission of the instructor and of Professor Tilton (419 Barnard Hall) is required.

I. Studies in the Legend of King Arthur.

Camelot and its knights in the literary and political imagination from Celtic legend to modern fantasy. Professor Prescott. M 2:10-4.

II. Studies in Fiction.

An examination of Dickens' use of comic and romance forms. Professor Morse. Tu 4:10-6.

III. Studies in the Novel and its Poetics.

An examination of the novel with emphasis on problems of subjectivity, fictional authority, structure, and genre theory. Professor Kurrik. W 2:10-4.

IV. Studies in Film.

An examination of the influence of literature on film and of film on literature, to show the relationship between the two arts. Professor Stimpson. W 4:10-6.

98. Senior Essay (Spring Term).

These seminars offer the student an opportunity to engage in research in the literature of a period with which she is already familiar and to write an essay on her findings. Written permission of the instructor and of Professor Tilton (419 Barnard Hall) is required.

I. The Renaissance.

Classical and Christian myth in English literature from Spenser to Milton. Prerequisite: one of English 65, 66, 67, or equivalent reading. Professor Kivette, M 2:10-4.

II. The Eighteenth Century.

Selected topics from Congreve to Austen. Prerequisite: English 73 or 74 or equivalent reading. Professor Thaddeus. Tu 2:10-4.

III. Romanticism.

Problems of interpretation: selected texts from Blake to Keats. Questions to ask and ways to answer them. Prerequisite: English 76 or equivalent reading. Professor Tilton. Tu 2:10-4.

IV. Victorian to Modern.

English literature and society from 1837 to 1918. Prerequisite: one of English 71, 77, 78, 88, or equivalent reading. Professor Robertson, W 4:10-6.

V. American Literature, 1800-1880.

Forms and themes of the American prose romance. Prerequisite: English 79 or 80 or equivalent reading. Mr. Irvin. W 4:10-6.

99. Independent Work.

Students who wish to prepare their senior essays on an individual basis, instead of taking course 98, should consult Professor Tilton (419 Barnard Hall) before the end of the junior year. Professor Tilton. Hours to be arranged.

Attention is invited to the following courses offered in Columbia College:

C3271y. Studies in American Literature and Culture I: Ethnicity in American Writing Professor Sollors, Tu Th 11-12:15,

C3334y. The Later Chaucer: The Canterbury Tales. Professor Sundwall. M W F 2:10.

C3150x, Literature of the American Indian, Professor Kroeber, MWF 12:10.

Environmental Conservation and Management

This program is organized and administered by a committee of members of the Departments of Biology, Geography and Geology:

Professor of Geography
Leonard Zobler, Chairman

Professors of Biology Patricia L. Dudley ¹ Donald D. Ritchie

Professor of Geology
John E. Sanders

Associate Professor of Biology

Frederick E. Warburton, Acting Chairman, Spring Term

¹Absent on leave 1976-77.

This program acquaints the student with a set of ethical and material issues that are crucial to the survival of modern civilization and begins the development of the means to cope with them. These issues concern the adequacy of the earth's natural resources to sustain an environment of quality when confronted by the pressures of the current urban-technologic-population explosion. Their combined effects threaten the natural environment with profound and possible irreversible disturbances and question the land ethics of Western society. Subject to its requirements, the program seeks to respond to the broad array of student interests in the environment which may be preparatory to careers in planning, law, forestry, in wildlife, parks and reserve management, in teaching, environmental health, and in natural history.

The goals of the program are: (1) to train and equip students with the requisite skills, values, and attitudes to enable them to participate in the work of designing, establishing, and maintaining a viable human ecologic habitat, and (2) to promote the development of professional and research abilities in environmental science. The concept of the ecosystem lends unity to the multi-disciplinary character of environmental studies.

This academic program is designed around the idea that man's ecosystem is the set of interacting relationships among the physical, biological, and cultural forces that govern the human realm. Coherence is provided by core courses followed by in-depth studies along one of several subject matter or managerial tracks. The core courses are: General Biology (Biological Sciences 1-2), Ecology (Biological Sciences 8, not given in 1976-77; consult with chairperson for acceptable alternate course), Environmental Science (Geography 1, 2), and Conservation Theory (Geography W4014y). In addition a cluster of conservation courses on field work, readings, lab projects, and internships has been developed. Students may opt to follow a managerial or a scientific program. The core plus five advanced electives, two of which shall be a year seminar, satisfy the major requirements. Examples of specialized paths are: urban ecology, biological conservation, environmental and physical resources, coastal zones, urban and suburban land planning, environmental center operation. Students are encouraged to attend a summer field program in conservation, ecology, or earth science. To receive college credit see Committee Chairman for approval.

41, 42. Colloquium.

Readings, discussions, reports, and lab or field study of selected aspects of environmental conservation or planning. Occasional invited guests. Topics and sections will be announced at the beginning of the semester. Permission to register is required. Members of the Faculty. Hours to be arranged.

51, 52. Environmental Projects.

Special study projects in environmental science, field research, internships, and environmental issues of interest to the student. Individual arrangements with a member of the faculty.

Environmental Conservation and Management

69, 70. Seminar.

Reports and discussions of current individual or joint field research culminating in the senior essay. Committee Members. Hours to be arranged.

Additional courses in the program are offered by Biological Sciences, Geography, and Geology. For complete descriptions consult department course listings.

Biological Sciences 3. The Biology of Plants.

Biological Sciences 4. Natural History of the New York Area.

Geography 4. Ecology of Urban Industrial Society.

[Geography 30, Environmental Policy. Not given in 1976-77,]

[Geography 32. Land Use and Transportation. Not given in 1976-77.]

Geography 33, Environmental Planning and Perception.

[Geography 46. Environmental Monitoring, Not given in 1976-77.]

[Geography 61. Urban Parks and Environmental Centers. Not given in 1976-77.]

Geography W4011x. Pedology and Soil Resources.

[Geography W4012x, Hydrology and Water Resources, Not given in 1976-77.]

Geology 48. Coastal Zone Management.

Geology W4226y. Continental Shelf Sedimentation.

Geology W4927x. Principles of Oceanography.



Foreign Area Studies

This program is supervised by the Committee on Foreign Area Studies:

Professor of Chinese and Japanese John Meskill, Chairman

.

Professor of Anthropology

Abraham Rosman

Professors of English

David A. Robertson, Jr.

Barry Ulanov

Professor of History

Chilton Williamson

Associate Professor of French

Serge Gavronsky

Associate Professor of Oriental Studies

Barbara Stoler Miller

Assistant Professor of History

Daniel Field

Assistant Professor of Spanish

Marcia L. Welles

The purpose of Foreign Area Studies is to provide an introduction to the study of some one foreign region or country of the world. The work is divided into three elements: language, a scholarly discipline, and a diversified approach to a region. The student who wishes to major may choose one of the regions listed below. The courses named under each region include only those most commonly elected. Other courses, or other regions of concentration, may be chosen upon approval of the project by an adviser. Concentrations in African Studies can be arranged in certain departments; for information see advisers in Anthropology, Geography, History, and Political Science. For fuller descriptions of the courses listed, see under the appropriate department.

The senior requirement varies according to the region studied. Majors should consult their advisers for details.

A major in Foreign Area Studies is open to a limited number of qualified students whose applications are approved by the committee in charge. Freshmen and sophomores anticipating such a major should consult their class advisers and the officer in charge by March 1 of the sophomore year.

Asia (Adviser: Mr. Meskill) See Oriental Studies, page 146.

British Civilization (Adviser: Mr. Robertson)

This program emphasizes historical and literary traditions of British Civilization and is comprehensive enough to include specialized interests in the fields of imperial and commonwealth studies. A student who wishes to major should plan, in consultation with her adviser, a program to include (a) four courses in history; (b) four additional courses, of which two must be in English literature; (c) two courses in senior seminar in History or English.

Latin America (Adviser: Mrs. Welles)

A major consists of the five starred courses and five additional courses, two of which should be in one department and above the introductory level, chosen with the help of the adviser.

Foreign Area Studies

[Anthropology V3010y. Native South America.]

Anthropology V3029y. The Archaeology of the New World.

Anthropology W3015x. Contemporary Latin America.

[Art History 31. Pre-Columbian Art.]

Economics 29. The Economies of Underdeveloped Areas.

Economics W4321v. The Latin American Economy.

Geography W4201x. Latin America.

History W4780y, History of Latin American Civilization.

Political Science G4461x, Latin American Political Behavior.

Spanish 11. Significant Themes of Contemporary Latin American and Spanish Literature.

- *Spanish 15, 16, Spanish-American Culture,
- *Spanish 31-32. Spanish-American Literature.
- *Spanish 34. Latin American Seminar.

Russia (Adviser: Mr. Juviler)

A major consists of the starred courses and additional courses, the latter chosen to meet the following requirements: (a) at least two courses in Russian literature above the language requirement level; (b) four more courses on Russia, chosen with the help of the adviser; (c) three courses chosen from appropriate colloquia and senior seminars in consultation with the adviser; and (d) a reading knowledge of Russian adequate for research in the senior seminar.

[Art History G4331v, Russian Art.]

Geography W4401x, Economic and Population Geography of the U.S.S.R.

History 23. The Russian Revolutions of 1917.

- *History 27. Russia from the Time of Troubles to the Era of Reforms.
- *History 28. Russia from the Era of Reforms to the Death of Stalin.

History 30. Russian Radicalism and Its Antagonists.

History 31v. Serfdom in Russia and Slavery in the United States.

Political Science 20. Colloquium on Communism and Revolutionary Change.

Political Science 21. Colloquium on Politics and Social Change in the U.S.S.R.

Political Science G4487x. The Dynamics of Soviet Politics.

[Russian V1224y, Introduction to Russian Culture.]

Russian V3333x, V3334y. Introduction to Russian Literature.

[Russian V3462v, Gogol.]

[Russian V3464y, Dostoevsky,]

[Russian V3467x, Twentieth-Century Prose Writers.]

Sociology G4010v. The Structure of Soviet Society.

Western Europe (Adviser: Mr. Meskill)

For the program on England, see British Civilization above. For other Western European countries, such as the French, German, Italian, and Spanish-speaking countries, a major consists of ten courses, including (a) History 11-12 or two other history courses approved by the adviser; (b) two courses in the literature of one country, in the original language; (c) four more courses on the same country, chosen with the help of the adviser; and (d) two courses of senior seminar, usually in History.

The courses listed below are meant to indicate only the foundations on which a full program may be based. For more information, consult the adviser.

History 11. Main Currents of the Modern European World: Renaissance to the French Revolution.

Foreign Area Studies

History 12. Main Currents of the Modern European World: Waterloo to Today.

[Two other history courses may be substituted for 11 and 12 with the approval of the adviser.]

History 25. The Establishment and Downfall of the French Monarchy: 1515 to 1789.

History 26. France in Turmoil: 1789 to Today.

French 21, 22. Masterpieces of Literature from the Middle Ages to the Twentieth Century.

[German 11. Studies in German Literature (in German).]

[German 14. German Literature at the Turn of the Twentieth Century.]

[History 13. The Italian Renaissance.]

History-Italian V3197x. Dante's World.

[Italian V3221x. Machiavelli, Castiglione, Ariosto, and Tasso.]

English-Italian C3358y. Artistic Theory in the Renaissance.

[Italian V3449x-V3450y, Modern Italian Literature.]

Spanish 13. The Culture of Spain.

Spanish 18. Literature of the Golden Age.

Spanish 23y, Nineteenth Century Literature in Spain.

Spanish 25. Contemporary Spanish Literature, Part I.

Spanish 26. Contemporary Spanish Literature, Part II.

Art History 69. French Architecture 1500-1800.

Art History 76. European Painting Since the Renaissance.

History 91-92. Senior Seminars in European History.



Professors

Helen Phelps Bailey, LeRoy C. Breunig, Serge Gavronsky (Chairman; 314 Milbank Hall), Maurice Z. Shroder¹

Associate Professors

Renée Geen.² Tatiana Greene

Lecturer

Patricia Terry

Instructors

Simone Daly, I. Mark Paris, Lang Hoan Pham, Charles Potter, Lynda Snead, Ruth Sussman.

¹Absent on leave, Spring Term.

²Absent on leave, 1976-77.

Courses in the French department have a twofold objective: to perfect fluency in the written and the spoken language; and to develop an understanding and appreciation of the literature and culture of France.

New students who have already given evidence of advanced training in French may automatically be exempted from the language requirement. All other new students who intend to satisfy their requirement in French will, depending upon their preparation, be placed immediately in the appropriate language course or be asked to take a placement test, offered at the start of each semester (see College Calendar for exact dates). Those receiving a sufficiently high grade will fulfill the requirement. The others may do so by completing French 4. Note that French 8 does not count toward the satisfaction of the language requirement.

Students who have satisfied the language requirement can take literature courses conducted entirely in French (Course 20x, 20, 21, 22, 23-24, 25-26); courses in which the readings are in French, but with lectures, discussions, and papers in English (47, 48); and advanced language Course 6x.

The student majoring in French may select either of the following options:

- A. Literature and Language: Courses 21 and 22, or 23-24; two of the language courses 12, 13, 14, 15, 16; five one-term literature courses numbered 31-46; a one-term seminar numbered 52. Students with honor grades may choose to write a Senior Essay (Course 59, 60, A).
- B. Translation and Literature: Courses 21 and 22, or 23-24; Course 14 and two other advanced language courses numbered 12, 13, 15; three one-term literature courses numbered 31-46; and the Senior Project (Course 59, 60, B).

The student is expected to declare her option by the end of the junior year. Either program may include additional courses in French literature and language or in other subjects which vary with the interest of the student. Majors who plan to do graduate work are encouraged to acquire a reading knowledge of Latin or German.

All majors are expected to take the Junior French Test, a short-answer examination on literary history, literary terminology, and translation. Students will take the Major Examination (a written critical essay on a prepared question and an individual oral *explication de texte*), unless enrolled in the Senior Project (see 59, 60).

LANGUAGE COURSES

All courses except French 8 and French-Spanish 90 are conducted in French.

French

1-2. Elementary Full-Year Course.

Grammar, reading, composition. Work in the language laboratory is required. Course Chairman: Mrs. Daly. Section Ia. Mr. Potter. M T W Th F 9. Section Ib. Miss Pham. M T W Th F 9. Section II. Mrs. Daly: M T W Th F 10.

2x. Review of Elementary French.

Oral and written review of basic grammar and syntax. Reading in modern literature, oral practice, free composition, translation. Work in the language laboratory is part of the course. Primarily for students who need further instruction to qualify for the intermediate course. Course Chairman: Professor Greene. Section I. Miss Pham. M W F 10. Section II. Miss Snead. M W F 11. Section III. Miss Sussman. M W F 1:10. Section IV. Professor Greene. Tu Th 1:10-2:25.

3. Intermediate Course

Grammar and syntax. Reading in modern literature, oral practice, free composition, translation. Work in the language laboratory is part of the course. Prerequisite: Course 1-2, Course 2x, or an appropriate score on the placement test. Course Chairman: Mrs. Daly. Section I. Professor Bailey. M W F 10. Section II. Mr. Paris. M W F 11. Section III. Miss Sussman. M W F 12:10. Section IV. Mrs. Daly. M W F 1:10. Section V. Dr. Terry. Tu Th 10:35-11:50.

3y. Intermediate Course.

The equivalent of Course 3 but given in the Spring Term. Course Chairman: Professor Bailey. Section I. Professor Bailey. M W F 10, Section II. Mr. Paris. M W F 11. Section III. Miss Sussman, M W F 1:10. Section IV. Miss Snead, Tu Th 1:10-2:25.

4. French through Literary Analysis.

The study of literary texts from Pascal to Rimbaud as a basis for improving the comprehension of written and spoken French. Work in the language laboratory is part of the course. Prerequisite: Course 3 or an appropriate score on the placement test. Course Chairman: Professor Greene. Section I. Mr. Paris. M W F 10. Section II. Miss Pham. M W F 11. Section III. Miss Sussman. M W F 12:10. Section IV. Professor Breunig. M W F 1:10. Section V. Professor Greene. Tu Th 10:35-11:50.

4x. French through Literary Analysis.

The equivalent of Course 4 but given in the Autumn Term, Course Chairman: Professor Bailey. Section I. Professor Breunig. M W F 10. Section II. Professor Bailey. M W F 11. Section III. Mr. Paris, M W F 12:10. Section IV. Miss Snead. Tu Th 1:10-2:25.

6x. Composition and Conversation.

Weekly compositions designed to improve writing skill. Review of grammar and syntax. Pronunciation, recitation, conversations based on selected readings. Work in the language laboratory is part of the course. Prerequisite: Course 4 or a satisfactory score on the placement test, Limited to 15 students, Mrs. Daly, MW F 12:10.

8. Elementary French: Rapid Reading and Translation.

Intensive study of French grammar and syntax; vocabulary development; readings and translations, prepared and at sight, of texts in the students' areas of specialization. Limited to seniors. No previous knowledge of French required. Dr. Terry. Tu Th 10:35-11:50.

12. History of the French Language.

A study of the distinguishing characteristics of the French language in their relation to literary prose from the Middle Ages to the Twentieth Century. Analysis and translation of representative texts. Dr. Terry. Tu Th 9:10-10:25.

13. Advanced Grammar and Composition.

A systematic study of morphology and syntax; translation into French and free composition. Nonmajors may take course with permission of the instructor. Professor Greene. Tu Th 9:10-10:25.

- [14. Advanced Translation. Dr. Terry. Not given in 1976-77.]
- [16. Advanced Oral French. Mrs. Daly. Not given in 1976-77.]

French-Spanish 90. Problems in the Teaching of French and Spanish.

A methods course designed to train future teachers in theories and techniques of language teaching. Emphasis on teaching of conversation, grammar, literature, translation, and lesson organization. Students will actually practice and demonstrate techniques. Video-taping of some sessions for auto-criticism. Primarily for sophomores and juniors in the Education Program; others by permission. Mr. Crapotta and Mrs. Daly. Tu 12:10-1, Th 12:10-2. (Offered in alternate years.)

LITERATURE COURSES

For non-majors, the literature courses listed in this section will count toward the general requirement; Courses 47, 48, and W4603y are conducted in English.

20. Special Themes in Modern French Literature: Redefinitions of the Novel.

A study of the language; form, and theory of twentieth-century novelists. Authors to be considered include Proust, Breton, Queneau, Céline, Sarraute, Cixous, Robbe-Grillet, Ricardou, and Edmond Jabès. Professor Gavronsky. M W F 11.

20x. Special Themes in Modern French Literature: Existentialism.

Fiction, drama, and essays by Sartre, Malraux, Simone de Beauvoir, and Camus. Professor Shroder. Tu Th 9:10-10:25.

21, 22. Masterpieces of Literature from the Middle Ages to the Twentieth Century.

An examination of the scope and variety of French literature through analyses of the most significant works and currents from the Middle Ages to the twentieth century. Lectures, discussions and close textual analyses. Autumn Term: Medieval, Renaissance and Classical Literature. Spring Term: the Age of Enlightenment, Romanticism, Realism and Symbolism. Prerequisite: satisfaction of the foreign language requirement in French. French 21 may be taken for credit *without* completion of French 22. Professor Breunig. Tu Th 1:10-2:25.

21y. Masterpieces of Literature from the Middle Ages to the Twentieth Century. Part I.

The equivalent of Course 21 but given in Spring Term. Professor Bailey. M W 2:10-3:25.

22x. Masterpieces of Literature from the Middle Ages to the Twentieth Century. Part II.

The equivalent of Course 22 but given in Autumn Term, Professor Bailey, MW 2:10-3:25.

23, 24. The Culture and Institutions of France.

The study of the major cultural and institutional foundations of France from the Middle Ages to the present. Particular attention paid to the play of these forces on the contemporary period. Readings include historical, religious, and literary sources. Prerequisite: satisfaction of the foreign language requirement in French. Professor Gavronsky. M W F 9.

[25-26. French Historical Prose. Not given in 1976-77.]

[31v. The Middle Ages. Dr. Terry, Not given in 1976-77.]

32. Renaissance and Classical Prose.

Fictional and non-fictional prose of the sixteenth and seventeenth centuries. Authors will include Rabelais, Marguerite de Navarre, Montaigne, Descartes, Scarron, Pascal, La Rochefoucauld, Mme. de La Fayette, La Bruyère, and Perrault. Prerequisite: Course 21, 22 or 23, 24 or permission of the instructor. Professor Greene. Tu Th 9:10-10:25.

[33. Renaissance, Baroque and Classical Poetry. Professor Greene. Not given in 1976-77.]

34. The French Theatre of the Seventeenth Century.

Corneille, Racine, and Molière. Prerequisite: the same as for French 32. Professor Bailey. M W F 11.

[35y. Eighteenth-Century French Fiction. Professor Geen. Not given in 1976-77.]

37. Nineteenth-Century French Poetry.

Poetry and poetics from Romanticism through Symbolism. A study of the language of poetry, with attention to major figures, including Lamartine, Hugo, Nerval, Baudelaire, Verlaine, Rimbaud, and Mallarmé. Prerequisite: the same as for French 32. Professor Breunig, MWF 1:10.

- [38. The Nineteenth-Century French Novel. Not given in 1976-77.]
- [39. Twentieth-Century French Theatre. Professor Geen. Not given in 1976-77.]

[40x, Twentieth-Century French Fiction, Professor Shroder, Not given in 1976-77.]

41. Twentieth-Century French Thought.

An analysis of the definitions of language, revolution, and science in some of the major texts from Surrealism to Structuralism. Readings will include the works of Breton, Aragon, Sartre, Camus, Barthes, and Lévi-Strauss. Prerequisite: the same as for French 32. Professor Gavronsky. M W F 11.

[42. Twentieth-Century French Poetry. Not given in 1976-77.]

43. French Women Writers.

A literary and cultural study of poets, prose writers, and influential groups, with emphasis on Marguerite de Navarre, Louise Labé, the *Précieuses*, Madame de Sévigné, Madame de La Fayette, the eighteenth-century *salons*, Madame de Stael, Desbordes-Valmore, George Sand, Colette, Beauvoir, Duras, Rochefort, and Sarrazin. Prerequisite: the same as for French 32. Professor Greene. Tu Th 10:35-11:50.

- [44. Materials and Techniques of French Poetry. Professor Greene. Not given in 1976-77.]
- [46. Autobiography. Professor Shroder. Not given in 1976-77.]

47. Flaubert and Jovce.

Selected works of the two "novelist's novelists," considered in terms of the problems of modern fiction: the growth and transformation of the novel, the aesthetics of realism and symbolism, and the efforts to fuse substance and style. Readings in French and English; lectures, discussions, and papers in English. Prerequisite: satisfaction of the foreign language requirement in French. Professor Shroder. Tu Th 1:10-2:25.

48. Songs of the Troubadours and Trouveres.

An introduction to medieval lyrics in Old French and Provençal. Emphasis will be on the concept of genre and its relationship to the major themes in lyric compositions. Authors from both court and commons from the twelfth through the fourteenth centuries. Readings in French; lectures, discussions, and papers in English. Prerequisite: satisfaction of the foreign language requirement in French. Dr. Potter, M W F 1:10.

W4603y. French Poetry in the Twentieth Century.

A study of major poets and poetic movements from the death of Mallarmé to the present. Professor Breunia, Tu 4:10-6.

SEMINARS

The number of students in each seminar is limited and written permission is required in advance of registration period.

52. Research in Modern Poetry.

Professor Greene, W 2:10-4.

59, 60, Senior Project.

- A. Research into a precise topic of French literature and the preparation of a long essay in French. Open to seniors with honor grades. Students electing a one-year senior project take four one-term literature courses numbered 31-46; they are excused from the major examination; the thesis defense constitutes the oral section. Course 59 or 60 may be taken alone with special permission. In that case, the written section of the major examination is still required; the thesis defense constitutes the oral section. Members of the department, Hours to be arranged.
- B. The presentation and the translation into English of a French text of significant length and literary value. Students taking this course as a one-semester project will take the written section of the major examination; the defense of the translation project constitutes the oral section. Students with honor grades may elect a one-year project; they are excused from the major examination; the defense of the translation project constitutes the oral section.

STUDY ABROAD

Conducted at Reid Hall in Paris, 4 rue de Chevreuse, Paris 75006. For further information, consult Professor Katz, 502 Philosophy Hall.

INTERMEDIATE INSTITUTE. Open to students, except Freshmen, who have completed first-year French or its equivalent.

AUTUMN (14 weeks, September 8-December 14.)

H1201p. Intermediate Course, first half.

Strong emphasis on the spoken language; pronunciation, oral-aural drill. Reading of contemporary texts. Inductive study of grammar.

H1202q, Intermediate Course, second half,

Continued emphasis on spoken French; increased emphasis on reading and composition.

H3335q. Masterpieces of French Literature.

Analysis and discussion of major works of Medieval, Renaissance, and Classical literature.

H3445q. French Civilization and Culture.

French art and architecture, illustrating the periods approached through literature in H3335. Fee \$25.

ADVANCED INSTITUTES

Open to students who have completed French 21, 22 or its equivalent.

AUTUMN (14 weeks, September 8-December 14.)

H3442p. Advanced Composition and Explication.

A study of morphology and syntax. Readings from H3602 are used for analysis and explication de texte as well as for intensive training in composition.

H3446x, Civilization of Modern France.

Literature and ideology, through close reading of texts by Céline, Sartre, Barthes, Malraux.

H3602x. Contemporary French Literature.

Major trends in French thought since 1945, as they appear in poetry, fiction, criticism, and the theatre; backgrounds in thought of the pre-war period.

H3604q. Seminar.

Art history of the twentieth century, with emphasis on contemporary art.

SPRING (15 weeks, February 7-May 17.)

H3442y. Advanced Composition and Explication.

A study of morphology and syntax. Readings from H3602 are used for analysis and explication de texte as well as for intensive training in composition.

H3446y. Civilization of Modern France.

H3602y. Contemporary French Literature.

H3606y. Supervised Study in France.

Special study in the French system, normally in the student's major field, under the supervision of the Institute staff. Courses may be selected from the offerings of the various Paris universities as well as the *Institut d'Etudes Politiques*, the *Ecole du Louvre*, and others. These courses should, where appropriate, include participation in the indicated supplementary *cours de travaux pratiques*.

THE JUNIOR YEAR IN PARIS

The two courses listed below constitute a full year's program, primarily for juniors sufficiently advanced in French and in their majors (should the major not be French) to be able to profit from the program and particularly from the tutorial (V3997-V3998), in which a thesis is normally written under the direction of a French expert on the student's particular area of interest.

V3991x-V3992y. Supervised Study in France.

Special study under the supervision of the Director of Studies of Reid Hall in Paris. This normally involves work in an individually arranged program, in courses in the various Paris universities, the *Institut d'Etudes Politiques*, the *Ecole du Louvre*, and others. Permission of the major adviser and the Chairman of the Barnard French Department required.

V3997x-V3998y. Supervised Research in France.

Normally this course is open to students only in consultation with and under the supervision of the Director of Studies of Reid Hall in Paris and involves individual work with an established specialist in the student's major field. Permission of the major adviser and the Chairman of the Barnard French Department required.



Director: Professor Serge Gavronsky, 314 Millbank

Freshman Seminars aim to encourage students to read systematically and critically, and to form and express individual judgments. Readings and discussions of primary works by major writers of the Western tradition. Sections are limited to fifteen students.

1. Readings in the Humanities.

Descartes: *Discourse on Method*; Shakespeare: *The Tempest*; Mark Twain: *The Adventures of Huckleberry Finn*; and other texts. Section I. Professor Brereton. Tu Th 2:40-3:55. Section II. Professor Ledkovsky. M W F 1:10. Section III. Professor Shroder. Tu Th 10:35-11:50.

2. Readings in the Humanities.

Plato: *Apology, Crito*; Shakespeare: *Hamlet*; Hawthorne: *The Scarlet Letter*; and other texts. Section I. Professor B. Miller. Tu Th 11-12:15. Section II. Professor Stimpson. M W F 2:10. Section III. Professor Welles. M W F 10.

3. Readings in the Social Sciences.

Tocqueville: *Democracy in America*; J. S. Mill: *The Subjugation of Women*; C. Wright Mills: *The Power Elite*; and other texts. Section I. Professor Kessler. M 2:10-4. Section II. Professor McCaughey. Tu Th 9:10-10:25.

4. Readings in the Social Sciences.

Sophocles: *Antigone*; Freud: *Civilization and its Discontents*; George Jackson: *Soledad Brother*; and other texts. Section I. Professor Eisenstein. Tu Th 11-12:15. Section II. Professor Juviler. Tu 2:10-4.

5. Readings in the Natural Sciences.

Galileo: *Dialogues*; Carnot: *Reflections*; Newton: *Opticks.* Professor Friedberg. Tu 3:10-5.

6. Readings in the Natural Sciences.

E. Curie: *Madame Curie*; A. Sayre: *Rosalind Franklin and DNA*; K. E. Wilkie: *Maria Mitchell Stargazer*; and other texts. Professor Braine. Tu 2:10-4.



Geography

Professor

Leonard Zobler (Chairman; 334 Milbank Hall)

Lecturer

Beverly Moss Spatt

Associate

Toby Berger Holtz

Instructor

M. Lou Benard

Other officers of the University offering courses listed below:

Professors

William A. Hance, Robert A. Lewis, Kempton E. Webb

Assistant Professors

Stephen Gale, Colin High, Paul E. King

GEOGRAPHY

The special point of view of Geography is that it integrates the social, biological, and earth sciences into a human ecology of settlement areas in which activities interact with each other and with nature, forming unique regions. The student of Geography thus acquires a holistic perspective of the earth and its parts that extends beyond the experiences of her own place and time. Some specific questions that Geography seeks to answer are: Why do cities locate where they do, grow to certain sizes and develop internal structures that perform unique functions? How do cities and their hinterlands relate to each other and to other city-hinterland units forming a system of cities? How serious a threat are resource depletion and environmental deterioration to the survival of human culture? Do third world countries face the same problems of resource exhaustion and pollution in their efforts to attain higher living standards as the United States? Can humans evolve an affluent world urban-industrial society that does not upset the global balance?

In pursuit of the answers to these questions, and to others, geographers examine the behavior of man-environment spatial systems at different times and in different places. An understanding of the dynamics of the interactions among human behavioral patterns, resources, technology, and space suggests ways for anticipating and ameliorating contemporary environmental problems and planning for the future. Geographers thus are involved deeply in regional and urban planning, and resource management in both developed and underdeveloped regions.

A knowledge of earth science and social science is an essential part of geographic training. Geography 1, 2, 3, 4, and a year seminar (59, 60) are required. During the seminar a senior essay is prepared, usually based on original field research. The remainder of the major consists of four additional approved courses and is tailored to the student's interests, which usually are along one of the following paths: natural resources, specialization in a region, as Africa, Latin America, U.S.S.R., or Anglo-America, or a substantive field as urban geography, agriculture, energy and mineral raw materials, manufacturing, location theory, cartography, or environmental geography.

In the place of a major examination each student in the senior seminar (59, 60) will prepare an essay.

Laboratory Science Requirement: The college requirement in laboratory science may be satisfied by taking Courses 1 and 2.

ENVIRONMENTAL CONSERVATION AND MANAGEMENT

Conservation is concerned with man's stewardship of the earth as his home and the proper management of its resources. The particulars of this program will be found on pages 84-85.

GEOGRAPHY

1. 2. Environmental Science.

The natural environment of man viewed as the fusion of spatially interacting processes, flows, cycles, and forms occurring close to or on the earth's surface. Environmental system modifications and deteriorations caused by the pressures of urbanism, technology, and population. Autumn Term: description of natural equilibria in the atmosphere, hydrosphere, pedosphere, and lithosphere, and their vulnerabilities to disturbances induced by the pressures of human activities. Remedial measures and conservation issues. Spring Term: classification and location of the earth's major biomes according to the unique aspects of their ecosystems. Examination of pristine and altered environments. The natural resources using agricultural, energy, and mineral systems of urban-industrial society and their degenerative feedback effects, and planning for environmental stability. This course satisfies the basic science requirement. Permission for lecture and laboratory assignment required. Professors High and Zobler. Lec. M W 12:10. Lab. M 2:10-5, Tu 9-11:50, 2:10-5, W 2:10-5, Th 2:10-5.

3. Agricultural Development and Agrarian Societies.

An ecologic and economic-geographic review of world agricultural systems according to natural biomes, with special reference to their food producing capabilities. Comparative assessment of land, labor, capital, and culture as agents affecting global, national, and regional potentials for expanding farm output to meet the demands of future population growth. The contribution of agriculture to development and its place in an urban-industrial society. The politics of hunger. Instructor to be announced. M W 1:10 plus tutorials and reports.

4. Ecology of Urban-Industrial Society.

The technologic and geographic dependence on natural resources of urban-industrial society. Interrelations between the locational availability of mineral and energy raw materials, transportation, manufacturing and urbanization. The future outlook for supplies of raw materials to sustain growth and development and the politics of survival under scarcity. Instructor to be announced. M W 1:10 plus tutorials and reports.

- [30. Environmental Policy. Mrs. Spatt. Not given in 1976-77.]
- [32. Land Use and Transportation. Dr. Spatt, Not given in 1976-77.]

33. Environmental Planning and Perception.

Introduction to planning practice with an emphasis on the environmental quality of the core cities and surrounding suburbs of metropolitan areas. Special topics include housing, waste disposal, open space, neighborhoods, and citizen participation and confrontation. Examples taken from New York City and new towns. Dr. Spatt. W 3:10-5 plus tutorials.

- [35. The New York Metropolitan Region. Not given in 1976-77.]
- [46. Environmental Monitoring. Not given in 1976-77.]
- [61y. Urban Parks and Environmental Centers. Not given in 1976-77.]

W1019x. Spatial Organization of Society.

An introduction to human geography with an emphasis on the spatial patterns of human activity and the social and economic processes underlying them. Topics will include the flow of information and decision making over space, perception of space, and the location of various forms of economic activity. Professor King. Tu Th 1:10-3.

W4902x. Natural Resource Decision Methods.

Methods of analyzing and evaluating natural resource development programs, as benefit-cost analysis, input-output analysis, linear programming. Prerequisite: Geography W3071x-W3072y, W4900x, or permission of the instructor. Instructor to be announced. Th 4:10-6.

W4912y. Resources of the Seas.

Fishery and mineral resources of the seas and nearshore waters and their potential for further development. A geographic review of the technologic, economic, institutional and political barriers to effective management. Trends in changes in the law of the seas. Instructor to be announced. W 4:10-6.

W4111x, Pedology and Soil Resources.

Introduction to the biogeochemistry of soils and their morphology, genesis, and classification. The ecology, management, and conservation of soils in different agricultural systems. Mapping, evaluation, and planning of land sites for competing uses, as farm, forest, parks, open space, and urban. Two one-day field trips and occasional laboratory sessions. Professor Zobler. Tu Th 3:10-4. Lab. Tu or Th 4:10-6.

[W4112x. Hydrology and Water Resources. Not given in 1976-77.]

W4114y. Conservation Theory and Environmental Management.

The study of contemporary conservation issues, as the interaction between expanding demand, technology, environmental quality, limited resources, value perception, and economic or other decision criteria. History of the conservation movement and a review of man-environment models. Trends in environmental law, planning, conflict resolution, and government policy at various geographic scales. A broad range of case studies and impact statements will be used as examples. Professor Zobler. Tu Th 1:10-2.

[C3019x. Problems of Developed and Underdeveloped Areas. Not given in 1976-77.]

W3020x. Economic Geography.

An introduction to the study of the economic factors in locational decisions and their relationships to the distribution of world resources and industries. This course will be directed to students who desire a survey of the systematic relationships between economic and spatial distributions, with an emphasis on pertinent economic and geographic theory. Professor Gale, M 2:10-4 and third hour to be arranged.

W3071x-W3072y. Quantitative Techniques in Geography.

Theory and techniques of measuring geographic distributions. Descriptive and analytical methods (regression, factor analysis) useful in dealing with areal associations and interactions. Introduction to "packaged" programs useful for displaying and analyzing spatial patterns (including Symap and Trend Surface). Additional selected programs (point pattern analyses, frequency distributions, and taxonomic procedures). Professor King. Tu Th 11-12:15.

W4018y, Cartography.

The use of maps for illustrative and statistical purposes, as point, line, and area symbols, and for geographic analysis. A survey of photogrammetry and remote sensing and of modern map production methods. Experience in cartographic drafting, compilation, design, and evaluation. Use of aerial photographs in mapping and as map supplements. Permission of the instructor required. \$5 fee. Instructor to be announced. F 1:10. Lab. 2:10-4.

W4102y. World Energy Perspectives.

A survey of the world's energy position and the spatial patterns and trends of energy resources in terms of their occurrence, production, and consumption; implications viewed from economic, social, and political points of view, Professor Hance, Tu 4:10-6.

[W4125x. General Climatology. Not given in 1976-77.]

W4030x. Cultural Geography.

The concept of culture applied to geographic problems. Man viewed as the ecological dominant whose cultural imprint upon the earth's surface may be analyzed as the result of cultural, economic, and physical processes interacting through time. Readings in related fields and some interpretation of air photographs. Professor Webb. Th 2:10-4.

W4041y. Urban Geography.

Geographic aspects of urbanization; contemporary theories of the economic, social, and spatial structure of cities evaluated in terms of their application to existing patterns. Professor King. W 2:10-4.

W4050x, Population Geography.

Emphasis on concepts pertaining to population change and their relationship to geographic problems. Topics include population policy, population growth, fertility, mortality, migration, select population characteristics, and food and resource problems related to population growth. The impact of population change on society. Professor Lewis. M 11-12:50.

W4201x, Latin America.

Physical and cultural geography of Latin America. Systematic treatment of physical resource bases, pre- and post-Columbian landscapes, land use and tenure systems, spread of settlement, agriculture and industry, regional variations of resource definition and political influence, migration and regional development schemes. Evaluations and projections focus upon current problems of the environment, urban growth, and population. Professor Webb, W 10-11:50.

W4401x. Economic and Population Geography of the USSR.

Analysis of the Soviet Union in terms of its natural resources, manpower, population, agriculture, environment, extractive industries, manufacturing, and urbansim. Regional economic development and societal impact of the economic geography of the U.S.S.R. will also be emphasized. Professor Lewis. Tu 11-12:50

W4501y. Africa: A Systematic Geography.

A systematic approach to the geography of Africa, with emphasis on topics relating to economic development. Opportunities and limitations in agriculture, mining, and industry. African demography, migration, and urbanization. Regionalism in Africa. Professor Hance, Tu 6:10-8.

59, 60, Seminar in Geography.

Readings, discussions, and reports on various topics from the research literature. Preparation of the senior essay. Required of senior majors. Professor Zobler. Hours to be arranged.

GRADUATE COURSES

Certain graduate courses given in the University and Teachers College are open to qualified majors with the consent of the major adviser. These courses are described in the Bulletins of the Graduate School of Arts and Sciences and Teachers College.

Geology

Professor

John E. Sanders (Chairman; 328B Milbank Hall)

Other officers of the University offering courses listed below:

Professors

Wallace S. Broecker, Rhodes W. Fairbridge, 1 John Kuo, John E. Nafe

Associate Professors

Arnold L. Gordon, R. Keith O'Nions, W. Ian Ridley

Assistant Professors

Richard A. Schweickert, H. James Simpson

Adjunct Professors

K. L. Hunkins, Robert Jastrow

Adjunct Assistant Professor

Michael Ghil

Lecturer

Vivien Gornitz

¹Absent on leave, Autumn Term.

GEOLOGY

Geology deals with the study of the earth, applying various aspects of all modern sciences, especially chemistry, physics, and biology. The central theme of geology involves the many interwoven reactions which constitute the geologic cycle. The geologic cycle results from the effects of solar energy on the earth and on the organisms inhabiting the earth. In addition, the cycle depends on internal energy from the earth itself, which powers various igneous and tectonic processes. Geology is concerned with an understanding of how the operations of the geologic cycle in various environments through time have shaped the earth's surface and have created the geologic record. In the geologic record are preserved a decipherable history of past environments and of the progression, through time, of the populations of organisms that have inhabited the earth. A pressing modern concern of geology deals with the interactions between man's technologic cycle and the natural geologic cycle.

The first year of study may be selected from two sequences: (1) a broad, general introductory course (V1021x, V1022y) or (2) an introductory course emphasizing ocean science (V1046y) and planetary geology (V1044y). A year's work satisfactorily completed in any of the sequences fulfills the laboratory science requirement. With permission of the department a student may enter advanced courses in geology after completing one of these sequences.

Students having extensive preparation in mathematics, physics, and chemistry who desire to apply these disciplines to the study of the earth should enroll in V1051x and V1052y.

Major programs include three options: Option A: pre-professional preparation in non-biologic aspects of geology; Option B: pre-professional preparation in biologic aspects of geology; Option C: Earth Science major, including selected fields of study within geology and physical geography. Geologic concentration in problems of the coastal zone is also possible in Barnard's interdepartmental program on Environmental Conservation and Management.

Students electing any of the major options will take a sequence of courses which will be worked out in consultation with their major adviser. Majors in geology should plan to spend at least one summer in geologic mapping at an approved geologic field camp, in

research activities at an oceanographic institution, or as a participant in an approved field research program being carried out elsewhere.

There is no major examination, but a satisfactory research paper prepared in conjunction with a senior seminar is required. Students contemplating graduate study in geology should plan their programs to include a reading knowledge of two modern foreign languages (German, French or Russian generally), and a year course in chemistry, physics, and mathematics (including calculus for students choosing major Option A, and statistics for major Option B).

ENVIRONMENTAL CONSERVATION AND MANAGEMENT

Conservation is concerned with man's stewardship of the earth as his home and the proper management of its resources. Students in the interdepartmental program in Environmental Conservation and Management who desire to concentrate in coastal studies are required to take as electives Geology W4226y, 48, and TK 4802 (Teachers College), and to carry out their research in some coastal project. The core courses and further particulars of the program are found on pages 84-85.

V1021x, Physical Geology,

The composition and structure of the earth, the internal and external forces acting upon it, and the surface features resulting. Laboratory includes study of common rocks and minerals, of contour maps as means of depicting the earth's morphology, and of geologic maps to infer the subsurface structure of the earth's crust, and three required field trips to local geologic features: beach trip (Sept. 18 or 19), Edgewater, N.J. (Oct. 15, 16 or 17), and Fort Tryon Park (Oct. 22, 23 or 24). Professor Sanders and staff. Lec. M W F 10. Lab. (3 hours) M 2:10-5; Tu 9-11:50, 2:10-5; W 2:10-5; Th 9-11:50, 2:10-5.

V1022y. Historical Geology.

The history of the earth and of the life upon it from the beginning to modern times. The laboratory and assigned work include study of invertebrate fossils and of geologic maps and structures, museum trips, and a required one-day field trip to Catskill, N.Y. (Apr. 22, 23, or 24). A research paper on a geologic topic is due on April 18. Prerequisite: V1021x. Professor Sanders and staff. Lec. M W F 10. Lab. (3 hours) M 2:10-5; Tu 9-11:50, 2:10-5; W 2:10-5; Th 9-11:50, 2:10-5.

V1044y, Stars, Planets and Life.

History of events in the Cosmos leading up to formation of the earth. Geology of the earth, Moon, Mars, and Venus from earthbound and spacecraft observations. Impact of geological changes on biological evolution. Environmental change and human evolution. Possibilities for life and intelligence in the Cosmos. Chance versus design in cosmic evolution. Philosophical implications in the synthesis of astronomy, geology, and biology. Professor Jastrow and Dr. Gornitz. Lec. Hours to be arranged. Lab. Hours to be arranged.

V1046y. Earth's Oceans and Atmosphere.

The ocean and atmosphere circulation act jointly to distribute over the earth the incoming solar energy, thus promoting a hospitable environment for most of the earth. The ocean and atmosphere and their interaction are studied over a wide spectrum of time and space scales with the goal of understanding the climate and weather of both the ocean and atmosphere. Man's attempts at computer simulation of earth's climate are discussed, as well as occurrences of ocean/atmosphere/climate anomalies. Recommended preparation: high school physics, chemistry, and mathematics. Professor Gordon. Lec. Tu Th 10. Lab. Hours to be arranged.

V1051x, Principles of Geology, I.

Materials, forms, structures and processes that occur at or beneath the earth's surface. Development of the earth's surface in time. Geology as a factor in determining man's

physical environment. Prerequisite: high school chemistry, physics and mathematics. Corequisite: a term of physics or chemistry. This course is prerequisite for advanced undergraduate geology courses. To be taken together with Geology V1052 in either order, with permission of the instructor. Professor Nafe. Lec. Tu Th 4:10. One 2-hour laboratory-conference a week and field trips to be arranged. Field trip fees \$10.

V1052y. Principles of Geology, II.

Materials, forms, structures and processes that occur within the earth. Endogenetic processes that governed the earth's development in time. Reaction rates and equilibria within the earth's crust. Occasional lectures by research scientists on subjects of current interest. Prerequisite: high school chemistry, physics and mathematics. Corequisite: a term of physics or chemistry. Professor Nafe. Lec. Tu Th 4:10. One 2-hour laboratory-conference period a week and field trips to be arranged.

W4411y, Principles of Structural Geology.

Analysis of geologic deformation based upon the principles of mechanics and utilizing research data from laboratory and field investigations. Methods in structural analysis. The mechanics of deformable bodies, fracture and faulting, the brittle-ductile transition in rocks, flow and folding. Selected readings. Prerequisite: V1051x, V1052y or equivalent. Instructor to be announced. Lec. Tu Th 6. Lab. Th 2:10-5. Field work to be arranged.

W4941x. Principles of Geophysics.

The structure of the earth as inferred from geophysical investigation. Principles of measurement and interpretation. Gravity, isostasy, earthquake seismology, refraction and reflection methods, geomagnetism, marine geophysics. Prerequisite: calculus through Mathematics V1202 and physics through Physics C1007. Professor Nafe. Tu Th 2:10-3:30.

V3522y. Exploration Geology and Mining Geophysics, I.

The geological environment of mineral deposits and their structural control. Ore genetical principles as a guide to mineral deposits. Geochemical and geophysical anomalies related to mineral deposits, their detection and interpretation. Prerequisite: V1051x, V1052y. Professor Kuo and instructor to be announced. M W F 10.

W4008x. Introduction to Atmospheric Science.

Basic physical processes controlling weather and climate; the equations of fluid dynamics; the ocean-atmosphere interface; use of meteorological satellites and fast computers in weather forecasting and climate prediction; evolution of earth's atmosphere; atmosphere of Mars and Venus. Professor Ghil. M W 9-10:30.

W4113x. Elements of Mineralogy and Crystallography, Nonsilicates and Ore Minerals.

Crystallography, including principles of symmetry, internal structure of crystals, coordination, bonding, and external crystal form. Physical properties, occurrence, mode of origin, and the economic and geologic significance of the ore minerals and the nonsilicates. Application of physical properties and chemical tests in the recognition of minerals. Given in sequence with W4114y. Prerequisite: V1051x, V1052y, and elementary college physics, and chemistry, or permission of the instructor. Instructor to be announced. Lec. Tu Th 11. Lab. Tu 1:10-4.

W4114y. Elements of Mineralogy and Crystallography, Silicates and Rock-Forming Minerals.

Physical properties, occurrence, mode of origin and geologic significance of the more important silicates and other rock-forming minerals. Application of physical properties and chemical tests in the recognition of minerals. Given in sequence with W4113. Prerequisite: W4113x, or permission of the instructor. Instructor to be announced. Lec. Tu Th 11. Lab. Tu 1:10-4.

W4120y. Analytical Mineralogic Techniques.

Analytical methods for mineral identification and study, including the polarizing petrographic microscope, the reflecting polarizing microscope, x-ray diffraction (both powder and single crystal methods), x-ray fluorescence, and differential thermal analysis. Prerequisite: W4113x and W4114y or equivalent. Instructor to be announced. Lec. Tu Th 10. Lab. Th 1:10-4.

[W4327x. Principles of Geomorphology.

Professor Fairbridge, Not given in 1976-77.]

W4009x. Chemical Geology.

Thermodynamics as applied to earth systems, x-ray theory as applied to mineral structure determination and to elemental analysis, nuclear theory as applied to radioactivity monitoring and age dating. Professor Broecker. Tu Th 4:10-6.

W4883x. Principles of Geochemistry.

Introduction to the origin of the chemical elements; processes responsible for the chemical make-up of the solar system and the earth; geochemical cycles presently operating in the earth's atmosphere, hydrosphere, and lithosphere. Professor O'Nions. M W F 9.

W4201x. Principles of Sedimentation.

Sedimentary particles and the processes by which these particles originate, are transported, and are deposited. Primary sedimentary structures. Conversion of sediments to sedimentary rocks. Interpretation of sedimentary rocks, Laboratory studies emphasize microscopic study of sediments and sedimentary rocks, and megascopic study of primary sedimentary structures. Three one-day field trips, Permission of the instructor required. Professor Sanders, Lec. M W 2:10. Lab. 3 hours to be individually arranged.

W4221v. Principles of Stratigraphy.

Historical and philosophical foundations of geology. Principles of classification and correlation, emphasizing applications to paleogeographic and paleotectonic reconstructions. Evaluation of geosynclines in terms of plate-tectonic theory. Prerequisite: W4701, Biology-Geology W4661, or permission of the instructor. Professor Schweickert. Lec. M W F 10. Lab. Hours to be arranged.

W4226v, Continental-Shelf Sedimentology.

Theory and techniques of modern marine sedimentology, including physical processes of deposition and diagenesis. One-day field trips. Prerequisite: Geology W4113 and W4114, Biology-Geology W4661, and college chemistry. Estimated field trip fee \$10. Professor Sanders. Lec. M W 2:10. Lab. W 3:10-5.

[W4928y. Submarine Geology. Professor Heezen. Not given in 1976-77.]

W4701x. Introduction to Petrology.

The classification and genesis of igneous, sedimentary, and metamorphic rocks. The major rock types will be examined in hand specimens and under the microscope. Prerequisite: V1051x, V1052y and elementary knowledge of physics and chemistry. Recommended preparation: Geology W4114y. Professor Ridley. Lec. Tu Th 5:10. Lab. 2 hours to be arranged.

W4927x, Principles of Oceanography.

Properties of sea water; water masses and their distribution; sea-air interaction influence on the ocean structure; basic oceanic circulation pattern; relation of diffusion and advection with respect to distribution of ocean properties; measurement techniques and methods of data processing and analysis. Factors controlling the average concentration and distribution of dissolved chemical species within the sea. Recommended preparation: a sound background in mathematics, physics, and chemistry. Professors Hunkins and Simpson. Tu Th 12:40-2.

Geology

48. Coastal Zone Management.

Geologic, physical, biologic, and climatic factors in origin and present dynamics of various kinds of coast, with emphasis on the coasts in the New York area; mankind's use of coastal zones; problems in management; and governmental and private programs. Lectures, readings, discussions, outside speakers, individual research projects leading to a term paper, and at least four field trips. Prerequisite: Geography 1, 2; or Geology V1021x, V1022y; or the equivalent. Professor Sanders. Hours to be arranged.

60. Seminar in Geology.

A seminar course with discussions, problems, and readings on various problems in geology. Prerequisite: a year of geology. Required of senior majors. Students should consult with Professor Sanders at the beginning of their senior year.

COLUMBIA COURSES

The following courses, listed by subdivisions of the Columbia Department of Geological Sciences, are open to qualified students with the permission of the Barnard chairman. Courses in brackets are given only in alternate years, and will not be given in 1976-77.

TERRESTRIAL AND MARINE GEOLOGY

W4049y. World Regional Geology.

[W4053x. Geology of the New York Region.]

W4222x. Phanerozoic Stratigraphy of North America.

TK4802x. (Teachers College). Coastal Oceanography.

W4521x. Exploration and Mining Geophysics, II.

W4661x, Introduction to Paleontology,

W4948v. The Ocean Floor.

SOLID EARTH GEOPHYSICS AND PLANETARY SCIENCE

[V3902. Introduction to Geophysics.]

W4415x. Principles of Rock Deformation.

W4901x. Paleomagnetism.

W4902y. Remote Sensing in Geology.

W4915y. Terrestrial Planets and the Moon.

W4942v. Geophysical Methods.

W4945x. Geophysical Theory, I.

W4946y, Geophysical Theory, II.

OCEANS AND ATMOSPHERES

W4030y, Climatic Change.

[W4885x. The Chemistry of Continental Waters and Air.]

W3000 x or y. Tutorial Study in the Earth Sciences.

Professor

Brigitte L. Bradlev (Chairman: 320B Milbank Hall)

Associate Professor

Gertrud M. Sakrawa

Assistant Professor

Frederick G. Peters

Associate

Marvin Shulman

Instructor

Brunhilde Linke

The courses in the German Department are designed to develop proficiency in all the language skills and to present the cultural and literary traditions of the German-speaking countries: Austria, Germany, and Switzerland.

Students who intend to continue the study of the German language will be placed in the appropriate courses on the basis of their CEEB scores or, if such are not available, on the basis of a placement test taken before registration. The language requirement is fulfilled by the completion of German 4 or 4x. New students who have already demonstrated competence in German may enroll in any of the advanced courses.

The literature courses taught in German are open to all students who have completed German 4, 4x, or the equivalent. There are no prerequisites for the literature courses in translation.

A student majoring in German will plan her program to include German 5 (or the equivalent) and eight literature courses conducted in German, one of which is to be a colloquium. The major examination consists of a three-hour written section (in English) and of an individual oral examination of a half hour (in German). With special permission a student may submit a senior essay (Course 62) in place of the written section.

Students who elect German as part of a combined major will work out their special program in consultation with the departments concerned. Their German program will include six literature courses conducted in German.

LANGUAGE COURSES

1-2. Elementary Full-Year Course.

Elements of grammar, easy reading, written and oral practice. Five class meetings a week are required and may be chosen as follows: Section I. Mr. Shulman. M W F 9. Section II. Miss Linke. M W F 12:10. In addition each student must register in the Department for one of the following sections: Section I. Tu Th 9. Section II. Tu Th 12:10.

1y. Elementary Full-Year Course. Part 1.

Same as Course 1, but given in the Spring Term. Miss Linke. M Tu W Th F 9.

2x. Elementary Full-Year Course. Part II.

Same as Course 2, but given in the Autumn Term. Miss Linke. M Tu W Th F 9.

For Elementary Rapid Reading see Elementary German 7, 8.

3. Intermediate Course I.

Close reading and rapid reading, grammar review, practice in speaking and writing. Section I. Professor Sakrawa. M W F 10. Section II. Mr. Shulman. M W F 1:10.

3y. Intermediate Course I.

Same as Course 3, but given in the Spring Term. Mr. Shulman. M W F 1:10.

4. Intermediate Course II.

Study of German based on a variety of readings. Stylistic analysis. Practice in speaking and writing. Section I. Professor Bradley, M W F 10. Section II. Professor Sakrawa. M W F 1:10.

4x. Intermediate Course II.

Same as Course 4, but given in the Autumn Term, Professor Bradley, MW F 10,

5. Advanced Oral German and Composition.

A variety\of\short readings as a point of departure for\discussions and stylistic exercises. Emphasis on idiomatic usage and syntactical structures in order to develop fluency in speaking and proficiency in writing. Professor Sakrawa. M W F 1:10.

7, 8. Elementary German: Rapid Reading.

Autumn: Introduction to the comprehension and translation of German into English. Recognition of structures and vocabulary. Spring: Translation of original texts from various fields such as art history, science, philosophy, cultural criticism. Classes are conducted in English. The courses may not be used to fulfill the language requirement. No previous knowledge of German required, Professor Peters. M W F 9.

LITERATURE COURSES

The literature courses listed below are conducted in German. For non-majors they will count toward the general requirement. Prerequisite: Course 4, 4x, or the equivalent. Examinations are written in English. Papers may be written in German or in English. For courses conducted in English, see GERMAN LITERATURE IN TRANSLATION, courses, 50, 52, 55, and 56.

- [11. Studies in German Literature. Professor Bradley. Not given in 1976-77.]
- [14. German Literature at the Turn of the Twentieth Century. Professor Bradley. Not given in 1976-77.]
- [15. Goethe. Professor Sakrawa. Not given in 1976-77.]
- [16. German Romanticism. Professor Sakrawa, Not given in 1976-77.]

18. Schiller.

Schiller's dramas studied with the focus on the playwright's commitment to social and ethical questions; an introduction to his thought on "aesthetic education." Professor Bradley. M W F 11.

- [25. German Dramatists and Theaters in the Nineteenth Century. Professor Sakrawa. Not given in 1976-77.]
- [26. Modern German Theater. Professor Bradley. Not given in 1976-77.]

27y. Nineteenth-Century Realism.

A study of selected novels and novellas by Keller, Raabe, Fontane, Thomas Mann, and others. Professor Sakrawa. M W F 10.

28x. Contemporary German Prose Fiction.

Trends in narrative writing. Analyses of works by authors such as Böll, Johnson, Lenz, Frisch, Grass, Wolf. Professor Bradley. M W 1:10-2:25.

36. Goethe's Faust.

An intensive study of Goethe's *Faust*, Parts I and II. Professor Sakrawa. Tu Th 10:35-11:50.

45. Literary Traditions in the Times of the Medieval Empire.

An introduction to German literature from the Age of Chivalry to the Age of Humanism, with an emphasis on shifts in European imagination and thought. Professor Bradley. M W F 11.

[46. German Literature in the Eighteenth Century. Professor Sakrawa. Not given in 1976-77.]

61. Colloquium. Heinrich von Kleist.

A study of Kleist's dramas and novellas in comparison with classicist and romantic works of the period. Professor Sakrawa. Hours to be arranged.

62. Senior Essay.

Senior essay, based on the work of Course 61. Regular consultations with the instructor at hours to be arranged.

GERMAN LITERATURE IN TRANSLATION

[50. Kafka and Freud. Professor Peters. Not given in 1976-77.]

52x. German Intellectual History. Modern Reinterpretations of Four Western Cosmologies. Reinterpretations by Kierkegaard, Hegel, Marx, Nietzsche, Spengler, Freud, Jung, and Buber of Judaic, Greek, Christian, and Romantic cosmologies as embodied in four works of literature: *The Old Testament* (Genesis, Exodus, Job), Homer's *The Odyssey*, Dante's *The Divine Comedy* (selections), and Goethe's *Faust* (Part One). A knowledge of German is not required. Professor Peters. Tu Th 1:10-2:25.

[55. Masterpieces of German Literature and Thought. Professor Peters. Not given in 1976-77.]

56. Modern German Literature.

A study of significant dramatists and novelists of the 20th century, with some consideration given to the influence of Marxism and psychoanalysis. Ibsen, Strindberg, Brecht, Mann, Kafka, Musil, Hesse, and others. A knowledge of German is not required. Professor Peters. Tu Th 1:10-2:25.



Greek and Latin

Professor

Helen H. Bacon

Associate Professor

Lydia H. Lenaghan (Chairman: 215 Milbank Hall)

Assistant Professor

James Lee Franklin, Jr., Ann Cornell Sheffield

Assistant Professor of Modern Greek

Vassilios Christides

Other officers of the University offering courses listed below:

Professors

Coleman H. Benedict, William M. Calder III, Henry S. Commager, Jr., James A. Coulter, Howard N. Porter, Leonardo Tarán

Assistant Professors

Marylin B. Arthur, Roger S. Bagnall, 1 Joseph Solodow.

¹Absent on leave, 1976-77.

The objectives of the department are a knowledge of the language and an understanding of the literature and civilization of the ancient Greeks and Romans. Courses in ancient art, archaeology, history, philosophy, religion, and linguistics are strongly recommended.

A major in Greek: Eight courses in Greek above the elementary course. These must include Greek W4319x and either Greek-Latin 61, 62 or Greek W4105x-W4106y.

A major in Latin: Eight courses in Latin above the elementary course. These must include Latin W4319x and either Greek-Latin 61, 62 or Latin W4105x-W4106y.

A combined major in Greek and Latin may be arranged for qualified students on consultation with the major adviser.

Students who complete Greek or Latin V3998x or y with distinction, and whose other work in the major is of sufficiently high quality, will be eligible for the degree with honors.

For the major in Ancient Studies see page 42.

Barnard College participates in the program of the Intercollegiate Center for Classical Studies in Rome. Students who have completed at least four semesters of Latin above the elementary course, and at least one semester of elementary Greek, are eligible to apply for admission to the program of the Rome Center for one or two semesters, preferably in the junior year. Courses taken at the Rome Center may be counted toward the major and, in some cases, toward the fulfillment of the general requirements.

Barnard College is a Supporting Institution of the American School of Classical Studies at Athens and the American Academy in Rome, and certain privileges of those schools are open, without fee, to graduates of the College.

Foreign Language Requirement for the Degree: Students may fulfill the foreign language requirement in Greek or Latin either by completing Greek 11, 12 or Latin 3, 4, or one semester above Greek 12 or Latin 4; or by passing an exemption examination with a sufficiently high grade. This examination tests the student's knowledge of grammar and her ability to translate written Greek or Latin. Students may fulfill the foreign language requirement in Modern Greek by completing Modern Greek 4.

CLASSICS IN TRANSLATION

[Classical Literature 35. The Ancient Novel. Professor Bacon. Not given in 1976-77.]

Classical Literature 32. Classical Myth.

A survey of major myths from the ancient Near East to the advent of Christianity, with emphasis upon the content and treatment of myth in classical authors (Homer, Hesiod, Aeschylus, Euripides, Sophocles, Vergil, Livy, Ovid). Instructor to be announced. M W 2:40-3:55.

Classical Literature V3123x, Greek Drama and Its Influences.

The evolution of various types of tragedy and comedy from the 5th century B.C. in Athens to the 1st century A.D. in Rome. Relation of these forms to later European dramatic forms. Theories of comedy and tragedy including those of Aristotle. The production of plays. Professor Bacon. M W F 11.

[Classical Literature V3201x. The Social and Political Ideas of Plato. Not given in 1976-77.]

Classical Literature W4201y. The Ancient Epic and its Influence.

A study of the *Iliad* and the *Odyssey* with special attention to their oral composition. Comparison with other oral and written epics: the *Argonautica*, the *Aeneid*, *Beowulf*, the *Chanson de Roland*, and *Paradise Lost*. Instructor and time to be announced.

Classical Literature W4500y. Latin Literature in Translation

A study of the major classical Latin authors (Plautus, Terence, Cicero, Vergil, Horace, Livy, Propertius, Ovid, Seneca, Lucan, Petronius, Juvenal, Tacitus, Apuleius). Reading in translation, lectures, and discussion. Open to juniors and seniors. Professor Solodow. Tu Th 10:35-11:50.

[Classical Civilization V3155x. Politics and Political Theory in Classical Athens. Professor Coulter. Not given in 1976-77.]

[Classical Civilization V3156y. Daily Life of the Ancient Romans. Not given in 1976-77.]

[Classical Civilization V3158y. Women in Antiquity. Professor Sheffield. Not given in 1976-77.]

[Classical Civilization V3159x. Wealth and Poverty in Greece and Rome. Professor Bagnall. Not given in 1976-77.]

[Classical Civilization V3160y. Roman Religion. Professor Lenaghan. Not given in 1976-77.]

Classical Civilization V3161x. The Lamp of Experience: The Role of the Classics in 17th and 18th Century America.

Readings from the Americans and in turn from the ancient authors they read in an effort to evaluate the function of the classics in the period. Professor Lenaghan. MW 2:40-3:55.

Classical Civilization V3162x. The Structure of the Ancient City: Pompeii.

Pompeii: a picture of daily life in the early Roman Empire obtained from examination of public and private art and architecture, epigraphical materials, and literary texts. Comparative material from Rome, Herculaneum, and Ostia. Professor Franklin. M W 1:10-2:25.

GREEK LANGUAGE AND LITERATURE

1-2. Elementary Full-Year Course.

Grammar, composition, and reading. Course 1 is prerequisite to Course 2. Professor Bacon. MW F 9:35-10:50.

W1101x-W1102y, W1101y-W1102x. Elementary Course.

Equivalent to Course 1-2. W1101x-W1102y. Professor Calder. M W F 11-12:15. W1102x. Instructor to be announced. M W F 6:10-7:25. W1101y. Instructor to be announced. M W F 6:10-7:25.

11. Prose and Poetry.

Selections from Lysias, Herodotus, and elegy. Prerequisite: Course 1-2, or the equivalent. Professor Sheffield. M W F 10.

W1201x. Prose and Poetry.

Equivalent to Course 11. Professor Arthur. Tu Th 10:35-11:50.

12. Selections from Homer.

Prerequisite: Course 11 or permission of the instructor. Professor Sheffield. M W F 1:10.

W1202y. Homer.

Equivalent to Course 12, Professor Benedict, MWF 11,

V3305x. Tragedy.

Myth, chorus and other conventions of Greek tragedy as vehicles of the drama in Euripides' *Alcestis* and Sophocles' *Oedipus Tyrannus*. Implications of their widely contrasting treatment for the nature and scope of the form. Prerequisite: Courses 11 and 12 or their equivalents. Given alternately with Greek V3307. Professor Bacon. M W 2:40-3:55.

V3306y. Historians.

Extensive selections from Thucydides in Greek; the whole to be read in English. Discussion of composition and structure of the work as a whole. Prerequisite: Courses 11 and 12 or their equivalents. Given alternately with Greek V3308. Professor Tarán. M W 1:10-2:25.

[V3307x. Comedy, Professor Benedict, Not given in 1976-77.]

[V3308y. Philosophy. Professor Tarán. Not given in 1976-77.]

V3309x. Selections from Greek Literature 1.

Since the content of this course changes each year, it may be taken for credit in consecutive years.

Anabasis and Memorabilia. Xenophon as man of action, historian and Socratic. Prerequisite: Courses 11 and 12 or their equivalents. Professor Coulter. M W 1:10-2:25.

V3310y. Selections from Greek Literature, II.

Since the content of this course changes each year, it may be taken for credit in consecutive years.

Hesiod's *Theogony* and *Works and Days*; selected *Homeric Hymns*; correlative study of parallels from ancient Near Eastern mythology and literature. Professor Arthur. M W F 11.

W4319x. Greek Syntax.

The writing of sentences and connected passages in Greek. Prerequisite: at least four terms, or the equivalent, of Greek. Professor Arthur. Th 2:10-4.

V3997x or y. Directed Reading.

To be tested by a series of short papers, one long paper, or an oral or written examination. Permission of the chairman of the department required. Members of the Barnard and Columbia Departments. Hours to be arranged.

V3998x or y. Supervised Research in Greek Literature.

A program of research in Greek literature, with the composition of a paper embodying results. Permission of the chairman of the department required. Members of the Barnard and Columbia Departments. Hours to be arranged.

W4105x-W4106y. History of Greek Literature.

Lectures based on extensive readings in Greek literature from Homer to the fourth century A.D. Prerequisite: at least two terms of Greek beyond Course 11, 12. W4105x. Professor Arthur. W4106y. Professor Coulter. Tu 2:10-4 and a third hour to be arranged.

[Greek-Latin 61y, 62x. Comparative Readings in Greek and Latin Literature. Professors Bacon and Sheffield. Not given in 1976-77.]

LATIN LANGUAGE AND LITERATURE

1-2. Elementary Full-Year Course.

Grammar, composition, and reading. Course 1 is normally prerequisite to Course 2. Course 2 may be taken without Course 1 by permission of the instructor. It includes a complete review of grammar and syntax. Professor Sheffield. M W F 11-12:15.

W1101x-W1102y, W1101y, W1102x. Elementary Course.

Equivalent to Course 1-2. W1101x-W1102y. Section I. Autumn Term. Professor Benedict. Spring Term. Instructor to be announced. M W F 11-12:15. Section II. Professor Solodow. M W F 2:40-3:55. Section III. Instructor to be announced. M W F 6:10-7:25. W1101y. Instructor to be announced. M W F 6:10-7:25. W1102x. Professor Benedict. M W F 1:10-2:25.

3. Cicero: Selections.

Prerequisite: Course 1-2, or two or three years of high school Latin. Professor Lenaghan. M W F 10.

W1201v. Cicero.

Equivalent to Course 3. Instructor to be announced. Tu Th 10:35-11:50.

4. Vergil. Selections from the Aeneid.

Prerequisite: Course 3, or two or three years of high school Latin. Professor Sheffield. M W F 10.

W1202x. Vergil.

Equivalent to Course 4, Section I. Instructor to be announced. Tu Th 10:35-11:50. Section II. Instructor to be announced. Tu Th 5:10-6:25.

W1203y. Ovid: Selections from the Metamorphoses.

Prerequisite: Course 1-2, or two or three years of high school Latin. Professor Solodow. Tu Th 5:10-6:25.

V3012x or y. Lyric Poetry.

Selections from Catullus and Horace. Prerequisite: Course 4, or four years of high school Latin. V3012x. Professor Commager. Tu Th 4:10-5:25. V3012y. Professor Bacon. M W F 11.

33y. Medieval Literature.

A survey of representative late Latin and Medieval texts; readings from the Church Fathers, sacred and secular lyric, history, romance, satire, and biography. Practice in paleography. Prerequisite: Three semesters of college Latin or permission of the instructor. Professor Lenaghan. M W F 11.

V3305x. Historians.

Readings from the *Agricola* and the *Annals* of Tacitus, with emphasis on characterization and psychological analysis, organization of evidence, style. Prerequisite: Course V3012 or the equivalent. Given alternately with Latin V3307. Professor Lenaghan. M W F 11.

V3306y. Satire.

Satires of Horace and Juvenal; studies in the history of satire. Prerequisite: Course V3012 or the equivalent, Given alternately with Latin V3308. Professor Commager. Tu Th 4:10-5:25.

[V3308y. Philosophy. Professor Benedict. Not given in 1976-77.]

V3309x, Selections from Latin Literature, I.

Since the content of this course changes each year, it may be taken for credit in consecutive years.

Readings from Silver Latin literature, especially those authors not read in the regular curriculum, with attention to the development of genre and language and to the practice of literature under political restraint. Prerequisite: Course V3012 or the equivalent. Instructor to be announced. Tu Th 1:10-2:25.

V3310y. Selections from Latin Literature. II.

Since the content of this course changes each year, it may be taken for credit in consecutive years.

A survey of Cicero's philosophical essays; selections from *De Officiis* and the *Tusculan Disputations*. Prerequisite: Course V3012 or the equivalent, Professor Benedict, MW F 10.

W4319x. Latin Syntax.

The writing of sentences and connected passages in Latin. Prerequisite: at least four terms, or the equivalent, of Latin. Professor Solodow. Tu 11-12:50.

V3997x or y. Directed Reading.

To be tested by a series of short papers, one long paper, or an oral or written examination. Permission of the chairman of the department required. Members of the Barnard and Columbia Departments. Hours to be arranged.

V3998x or y. Supervised Research in Latin Literature.

A program of research in Latin literature, with the composition of a paper embodying results. Permission of the chairman of the department required. Members of the Barnard and Columbia Departments. Hours to be arranged.

W4105x-W4106y. History of Latin Literature.

Lectures based on extensive readings in Latin literature from the beginning to the fourth century A.D. Prerequisite: at least two terms beyond Course V3012, W4105x. Professor Commager. M W 4:10, and a third hour to be arranged. W4106y. Professor Lenaghan. Th 2:10-4, and a third hour to be arranged.

[Greek-Latin 61y, 62x. Comparative Readings in Greek and Latin Literature.

Professors Bacon and Sheffield. Not given in 1976-77.]

GRADUATE COURSES

Certain graduate courses given in the University are open to qualified majors with the consent of the chairman and the major adviser. These courses are described in the Bulletin of the Graduate School of Arts and Sciences.

MODERN GREEK LANGUAGE AND LITERATURE

1-2. Elementary Full-Year Course.

Course 1: basic grammar and syntax; practice in speaking, reading, and writing. Course 2: more advanced grammar and syntax; reading of simple texts, such as D. Solomos, **Héhemera tes Lampres**; practice in speaking and writing. Professor Christides. Tu Th 4:10-5:25.

3. Modern Greek Literature, I.

Representative prose and verse from the 18th century to the present. Speaking and writing of more complex and idiomatic Greek. Professor Christides. Tu Th 2:30-4.

4. Modern Greek Literature, II.

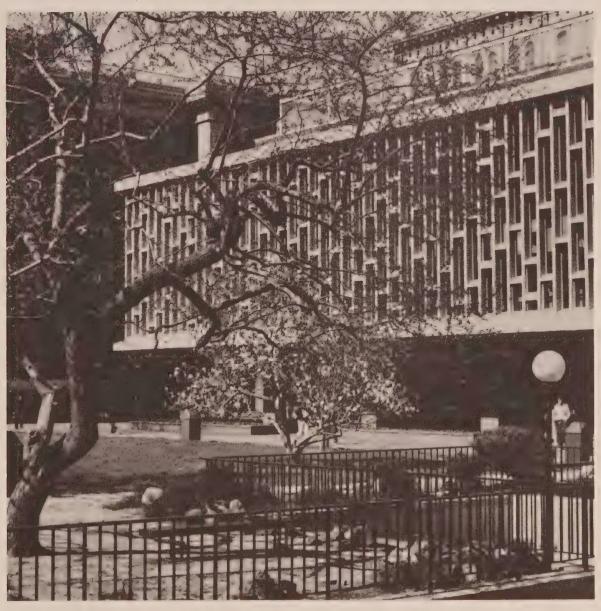
Reading and discussion of selected literary texts, such as poems of K. P. Cavafy and G. Sepheres, *hé Historia henos aihmalótou* of St. Doukas, *Diégémata* of D. Hatzes. Advanced work in speaking and writing. Professor Christides, Tu Th 2:30-4.

21. Medieval and Early Modern Greek Literature.

Study of works in translation representative of the most significant currents in Greek literature from the 10th century A.D. to the emergence of the modern Greek nation (1821), with particular emphasis on the Akritic ballads, the Epic of *Digenés Akritas* and the *Cretan Theater* (*Erōtócritos, Erōphilé, Sacrifice of Abraham*). Professor Christides. Tu Th 10:35-11:50.

22. Modern Greek Literature.

Study in translation of representative authors from the early 19th century to the present day: D. Solomos, A. Papadiamandes, K. P. Cavafy, S. Myriveles, N. Kazantzakes, V. Vassilikos, G. Sepheres, O. Elytes. Professor Christides. Tu Th 10:35-11:50.



History

Professors

Annette K. Baxter (Chairman; 412 Lehman Hall), Stephen E. Koss, Maristella Lorch (Italian), Chilton Williamson

Associate Professors

Suzanne F. Wemple Robert McCaughey

Assistant Professors

John W. Chambers. Daniel Field, Darline G. Levy

Lecturers

Patricia H. Labalme

Other officers of the University offering courses listed below:

Professors

J.M.W. Bean, Stuart Bruchey, Istvan Deak, D.M. Dunlop, Ainslie T. Embree, John A. Garraty, Nina G. Garsoian, Henry F. Graff, Loren R. Graham, Tibor Halasi-Kun, Nathan I. Huggins, Graham W. Irwin, Herbert S. Klein, William E. Leuchtenburg, Hollis R. Lynch, Eric L. McKitrick, Edward Malefakis, Walter P. Metzger, John H. Mundy, Robert A. Nisbet, Robert O. Paxton, Marc Raeff, Eugene Rice, William R. Roff, David J. Rothman, James P. Shenton, J. W. Smit, Morton Smith, Fritz Stern, Alden T. Vaughan, Isser Woloch

Visiting Professor

Shmuel Ettinger

Associate Professors

William V. Harris, Kenneth Jackson, Alan Silver, Marcia Wright

Adjunct Associate Professor

Arthur Hertzberg

Assistant Professors

Sheila Biddle, David Crew, Sheila Fitzpatrick, Paula Hyman, Andrzej Kaminski, Thomas C. Leonard, Hugh Neuburger, Peter Onuf, Rosalind Rosenberg, John D. Schmidt, Karen Spalding, John A. Toews

Absent on leave, Spring Term.

History, as knowledge of the past, touches all aspects of human experience. Historians' accounts of the past form a branch of literature in which factual statements can be verified in primary sources. History should be studied to improve understanding of man in society — his failures and his achievements — and to acquire a sense of the relevance of the past to the present.

Students who intend to major in history are urged to consult an adviser in the department at the beginning of the sophomore year in order to plan their academic programs for the remaining three years in college.

The requirements for a major in history are a minimum of eleven courses distributed as follows:

1. At least six courses in an area of concentration. Two of the six courses must be the senior research seminar in which the student will write a senior essay. While history majors usually concentrate on European or American history, they may, upon approval of the chairman, concentrate in any field of particular interest, such as ancient, medieval, Jewish, Oriental, African, cultural, or urban history.

- 2. At least three history courses outside the field of concentration.
- 3. At least two seminars, one of which may be an Introductory Seminar.

Note: Two courses of the eleven may be taken in other departments provided that such courses are closely related to the student's field of concentration, and provided that she obtains the written permission of her major adviser.

No special permission is necessary for Barnard College students to register for lecture courses listed in this catalogue. Full course descriptions of Columbia College courses will be found in the Columbia College catalogue. Written permission of the instructor is required for those wishing admittance to all seminars. Application forms for admission to Columbia seminars must be picked up from the departmental office, 613 Fayer-weather, and submitted to the instructor. Meeting arrangements and structure of each seminar will be announced by the instructor at the beginning of the course.

Columbia College students may not register for Barnard Senior Research Seminars.

Certain graduate courses, "G" courses, given at Columbia University are open to qualified majors with the consent of the Chairman of the Barnard Department and of the instructor. A description of these courses will be found in the Bulletin of the Graduate School of Arts and Sciences.

LECTURES, ANCIENT, MEDIEVAL, AND MODERN EUROPEAN HISTORY

W1001x-W1002y. The Beginning of History and the Bronze Age.

Professor Schmidt, MW 6:10-7:25 p.m.

W1005x, 1200 B.C. to Alexander.

Professor Smith. Tu Th 6:30-7:50 p.m.

W1006y. The Ancient World from Alexander to Theodosius.

Professor Harris. Tu Th 4:10-5:30.

W4508y. History of the Israelites to Alexander's Conquest of Power.

Professor Smith. Tu Th 4:10-5:30.

W4006x-W4007y. Introduction to the Study of Ancient Egypt.

Professor Schmidt, M 10-11:50.

W4010x. Roman Imperialism.

Professor Harris, M 4:10-6.

W4095x. Women in Classical Antiquity.

Professor Arthur, Tu 10-12.

3. The Early Middle Ages: 300 to 1050.

The fusion of Graeco-Roman, Judeo-Christian, and Germanic traditions, and the emergence of Europe as a cultural unit. Professor Wemple. Tu Th 10:35-11:50.

4. The High Middle Ages: 1050 to 1450.

The social environment, political institutions, church history, thought and science, from the Gregorian Revolution to the Renaissance. Professor Wemple. Tu Th 10:35-11:50.

[5. The Roots of the Modern World: Western Europe. 1230-1494.

Professor Wemple, Not given in 1976-77.]

W4203x. The Medieval and Early Modern Town and Village.

Professor Mundy. W 6:10-7:50 p.m.

W4189x. History of Spain.

Professor Malefakis. Tu Th 10.

W3321y. History of Poland-Lithuania and the Ukraine from 1569 to the Present.

Professor Kaminski, W 10-11:50.

History-Italian V3197x. Dante's World.

The historical background of Dante's political, social, and ethical thought and literary analysis of its poetical rendering. Major theological themes in Medieval thought as a background to and influence upon the *Divine Comedy*. Development of visual arts and ideas especially in the painting of Giotto. Guest lecturers: Professor Cousins (Religion) and Professor Davis (Art History) will be invited to participate. Professors Lorch and Wemple, Tu 12:10-2. Third hour to be arranged.

[History-Italian V3199x. Petrarch's World.

Professor Lorch. Not given in 1976-77.]

11. Main Currents of the Modern European World: Renaissance to the French Revolution. The forces—cultural, social, political, economic—which established modern Europe and

brought it into contact with the rest of the world. Instructor to be announced. Tu Th 2:40-3:55.

12. Main Currents of the Modern European World: The French Revolution to Today.

The French Revolution, nineteenth-century industrial revolutions, romanticism, liberalism, nationalism, socialism, and imperialism; and twentieth-century wars, revolutions, dictatorships, and aspirations. Professor Levy. Tu Th 2:40-3:55.

W4310y. History of Eastern Europe in the Middle Ages: 9th to 15th Century.

Professor Kaminski. Time to be announced.

W3201x. Foundations of Modern Europe.

Professor Rice. Time to be announced.

W3202y. Europe in the Age of Religious Wars: 1560-1660.

Professor Smit. Time to be announced.

W3207x, Europe: 1648-1740.

Professor Raeff. Time to be announced.

W3205x. European Politics and Society: 1870-1919.

Professor Crew, W F 11-12:15.

W3206y. Europe since 1919.

Professor Malefakis. Time to be announced.

[13. The Italian Renaissance. Dr. Labalme, Not given in 1976-77,]

W4200y, Italian Renaissance,

Professor Rice, M F 10.

W4215x. Italy since 1815.

Professor Malefakis. Time to be announced.

[14. The Reformation in Europe in the Sixteenth Century.

Dr. Labalme. Not given in 1976-77.]

[21. England under the Tudors and Stuarts: 1485-1714.

Professor Koss. Not given in 1976-77.]

22. Modern Britain: 1714 to Today.

The transformation from squirearchy to meritocracy, with an emphasis on the rise of industrialism, its effects on Britain's domestic and international situations, and the development of the welfare state. Professor Koss. Tu Th 2:40-3:55.

W4157y. Europe Lefts since 1830.

Professor Paxton, MW 4-5:30.

W3212y. The Expansion of Europe: 1415-1715.

Professor Irwin, Tu Th 4:10-5:25.

W4280x. Tudor and Stuart England.

Professor Biddle, Tu Th 2:10-3:25.

W4210x, Economic History of Europe.

Professor Neuburger, M 10-11:150.

25. The Establishment and Downfall of the French Monarchy: 1515-1789.

The cultural, intellectual, political, social, and economic developments that brought into existence the monarchy of Louis XIV and led to its collapse. Professor Levy. Tu Th 10:35-11:50.

26. France in Turmoil: 1789 to Today.

The cultural, intellectual, political, social, and economic developments that have kept France in turmoil from the French Revolution to Charles de Gaulle. Professor Levy. Tu Th 10:35-11:50.

[35. European Intellectual History: 1600-1789.

Not given in 1976-77.]

W4536x. Intellectual Currents in Modern Jewry.

Professor Hertzberg, W 10-11:50.

W4520x. European Jewry: 1492-1789.

Professor Hyman. Tu 2:10-4.

W4529y. European Jewry from the French Revolution to the 20th Century.

Professor Hyman, Tu 2:10-4.

W4524x-W4525y, The Jews in Eastern Europe from 1648 to the Present Day.

Professor Ettinger. Time to be announced.

W4150x-W4151y. France in the Revolutionary Era: 1715-1848.

Professor Woloch, F 10-1.

W4250x. Foundations of 20th Century Thought: European Intellectual History: 1890-1930.

Professor Toews. MW 11-12:15.

W3211x. The Rise of Modern Ideologies.

Professor Nisbet, Tu Th 10:35-11:50.

W4427x, History of the Habsburg Monarchy: 1815-1918.

Professor Deak. Time to be announced.

[19. European Diplomacy: 1914-1939. Not given in 1976-77.]

[20. The Second World War and the Recovery of Europe: 1939 to Today.

Not given in 1976-77.]

27. History of Russia from the Time of Troubles to the Era of Reforms.

Political, economic, and social history from the beginning of the seventeenth century to the middle of the nineteenth century. Professor Field. M W 2:10-3:25.

28. History of Russia from the Era of Reforms to the Death of Stalin.

Political, economic, and social history from the middle of the nineteenth century to the middle of the twentieth century, with special emphasis on the revolutions of 1917. Professor Field. M W 2:10-3:25.

W4328y. The British Empire and Commonwealth, from 1783 to 1949.

Professor Williamson, MW 11-11:50.

W4350x. Women in Revolutionary and Soviet Russia.

Professor Fitzpatrick. Time to be announced.

W4361y. History of Soviet Russia.

Professor Fitzpatrick, M 11-1.

SEMINARS. ANCIENT, MEDIEVAL, AND MODERN EUROPEAN HISTORY

W3910y. The Social History of the Roman Empire.

Topics will include class and status, slavery, methods of social control, philanthropy, the treatment and behavior of women, social mobility, organizations. The period will be c. 70 B.C. to c. 150 A.D. Professor Harris. M 4:10-6.

7y. The Revival and Survival of Rome.

The adaptation and transformation of the Roman cultural heritage studied in the works of Augustine, Boethius, Cassiodorus, Alcuin, John of Salisbury, Dante, Pierre Dubois, Bartolus, Petrarch, Valla, Machiavelli. Professor Wemple. Th 2:10-4.

W3579x. Greek Historiography.

Herodotus, Thucydides, the Alexander-historians. Professor Harris. W 4:10-6.

W3939y. Culture and Conflict in Early Greece.

Greek literature and society from the end of the Dark Ages through the sixth century; the rise of the *polis*; the social struggles of the period as they are reflected in the surviving documents. Professor Arthur. Time to be announced.

6. The History of Women in the Middle Ages.

The origins of the legal and social position of women in medieval society as reflected in patristic writings, Roman and Germanic codes. The contributions of women in the high and late Middle Ages to feudal and urban society, courtly love, monasticism, mysticism, medicine, and literature, studied through primary and secondary sources. Colloquium. Written permission of the instructor required. Professor Wemple, Tu 2:10-4.

[10. The Transformation of the Roman World: from Constantine to Charlemagne. Professor Wemple. Not given in 1976-77.]

15. The Civilization of Venice.

A consideration of Venetian history and culture, its reality and myth, both as a unique development and in a European context, from the fifth century to its destruction by Napoleon. Dr. Labalme. Th 4:10-6.

[16. The Renaissance in Northern Europe and Spain. Dr. Labalme. Not given in 1976-77.]

W3777y. Medieval Social History.

Readings in translation concerning social classes, social orders, and social and political theory and manners from the twelfth through the fifteenth century. Professor Mundy, W 4:10-6.

W3956x. Society and Revolution in Sixteenth and Seventeenth Century Europe.

The social dislocations underlying the major early movements: revolutions examined on the basis of source material and secondary literature. Professor Smit. M 2:10-4.

24. The History of Education in Western Europe through the Sixteenth Century.

The theories, practices, and institutions of education in the civilizations of Greece, Rome, Medieval Europe, the Renaissance and Reformation periods, from the Homeric ideal to the Puritan ethic. Dr. Labalme. Th 4:10-6.

32x. Women in Revolutionary Paris: 1789-1795.

Political attitudes and behavior of women in revolutionary Paris. Attention to the themes of feminist politics, welfare politics, and the politics of subsistence. Prerequisites: a reading knowledge of French, an introductory European history course, and permis-

sion of the instructor. A course in the French Revolution is desirable. Prof. Levy. W 2:10-4.

37. The European Enlightenment. Professor Levy. Not given in 1976-77.]

W3868y. European Cities in the Nineteenth Century.

A comparative survey of the causes and consequences of nineteenth century urbanization. Topics include urban migration, change and continuity in patterns of personal behavior, family life, and community organization; images and realities of social breakdown (crime, poverty, immorality). Emphasis on integrating local studies into a comparative framework. Reading knowledge of a continental European language recommended. Professor Crew. Tu 10-11:50.

W3909y. Problems of Jewish Migrations: 1880-1939.

Historical background and the socio-economic, political, and cultural problems of the mass migration. The responses of the Jewish communities of England, France, Germany, and the U.S. to the arrival of Eastern Europe immigrants. Professor Hyman. Th 2:10-4.

W3911x. Anti-Semitism in Modern Europe.

An analysis of the rise of modern anti-semitism and its relation to socio-economic and political development in Western Europe, Professor Hyman, M 2:10-4.

[36. European Intellectual Developments: 1789-1870. Professor Levy. Not given in 1976-77.]

W3997y. The Psychoanalytic Revolution in Historical Perspective.

Emphasis on the social, political, and cultural context of the emergence of Freudian psychology, on the ideological character of early divisions within the Freudian school, and on analogous developments in other areas of thought. Professor Toews. Tu 4:10-6.

W3996y. Institutions and Ideas. Professor Raeff, M 11-1.

W3969y, Seminar on the Army in European Politics and Society: 1815-1945.

The political influence of the officers in nineteenth and early twentieth century Europe. Conservative, fascist, and progressive military dictatorships in the interwar period. The living conditions, training, and ideology of the soldiers and the officers. Professor Deak. Time to be announced.

23. The Russian Revolutions of 1917.

A close scrutiny of the February and October Revolutions, relying largely on primary sources—memoirs, doctrinal writings, the accounts of participants, and documents. Prerequisite: History 28 or permission of the instructor. Professor Field. Tu 4:10-6.

30. Russian Radicalism and its Antagonists.

Social and political thought from the eighteenth century to the early twentieth: the enlightenment in Russia; the Decembrist movement; the slavophiles and later nationalists; the "westerners" and their successors; the development of Russian Marxism. Special emphasis on pre-Marxist radicalism. Professor Field. Tu 10:35-12:25.

[48. Modern Imperialism: Myth and Reality. Professor Williamson. Not given in 1976-77.]

31y. Serfdom in Russia and Slavery in the United States.

A comparative inquiry into the social and economic character of bondage in the nine-teenth century, with some attention to the impact of slavery and serfdom on politics and literature. Professor Field. Tu 4:10-6.

W3975x. The Dissenting Tradition: Russian Writers and the State from Tolstoy to Solzhenitsyn.

Discussion of the Russian literary intelligentsia vis-à-vis Tsarist and Soviet state, with emphasis on the tradition of moral protest and prophecy and its impact within Russia and on the West, Professor Fitzpatrick, Time to be announced.

- [33. Historians of Modern Europe. Professor Field. Not given in 1976-77.]
- [44. Origins and Rise of Fascism. Not given in 1976-77.]

W3825y. Religion and Social Change in England: 1558-1689.

Religion and the rise of capitalism: Weber, Tawney, Christopher Hill, and the debate on the "Puritan Revolution." Religion and political and social radicalism: the radical sects, including Levellers, Diggers, and Fifth Monarchists. Professor Biddle. Tu 2:10-4.

W3950x. Britain in the 30's.

"The low, dishonest decade," as Auden called it, interpreted through contemporary writings, memoirs, and historical reappraisals. The impact of the Great Slump on politics and society, the experiment in National Government, Fascism, Appearement, and the drift to war, Professor Koss. Time to be announced.

[45. The Life and Lifetime of Sir Winston Churchill.

Professor Koss. Not given in 1976-77.]

- [46. Europe in the Age of Tyrannies: 1914-1945. Professor Koss. Not given in 1976-77.]
- [47. Towards Munich and War: British Policy in the Thirties.

Not given in 1976-77.]

50x. Utopia and its Hinterland.

Imaginary societies from More to Orwell, with special attention to the ideological and political background and polemical purpose of each text. Professor Field. Tu 10:35-12:25.

LECTURES. UNITED STATES HISTORY

W1109x. Main Currents in American History: 1492-1865.

Professor Onuf. Tu Th 6:10-7:25.

W1110y. Main Currents in American History Since 1865.

Professor Rosenberg. Tu Th 6:10-7:25.

51. Survey of American Civilization to the Civil War.

The major theological and organizational concerns of seventeenth-century English colonists; the political and ideological process of defining an American; the social and economic forces that helped shape a distinctive identity; the inherent pressures that culminated in the nation's violent disruption in 1861. Professor McCaughey. M W F 10.

52. Survey of American Civilization Since the Civil War.

The major intellectual and social accommodations made by Americans to industrialization and urbanization; patterns of political and economic thought from Reconstruction to the New Deal; selected topics on post-World War Two developments. Professor McCaughey. M W F 10.

53. American Colonial History.

A study of continuity and change in the major institutions of American society from 1607 to 1783, Professor Williamson, Tu Th 10:35-11:50.

54. The American Revolution and its Aftermath.

Why and how the American people made a revolution, waged a war and climaxed their victories with the Federal Constitution. Professor Williamson. Tu Th 10:35-11:50.

W4601x. American Beginnings: 1584-1763.

Professor Vaughan. Tu Th 11-12:15.

W4603y. The American Revolution.

Professor Onuf. W 4:10-6.

W3121x-W3122y. The United States in the Nineteenth Century: 1815-1877.

Professor Shenton, Tu Th 2:40-3:55.

[57, Origins of Modern America: from Reconstruction to the First World War.

Professor McCaughey. Not given in 1976-77.]

84. American Intellectual History: 1865-1918.

An examination of the major intellectual trends in the United States between Appomattox and World War including Darwinism, mugwumpery, the emergence of the American university, cataclysmic thought in the '90's, the Progressive temper, the crisis of the Pragmatists in 1917. Professor McCaughey. Tu Th 9:10-10:25.

[60. The United States and World Affairs: 1898 to the Present.

Professor Chambers. Not given in 1976-77.]

69. War and Reform in Industrial America: 1898-1940.

Emergence of Urban, Industrial America and subsequent changes in attitudes, social order, and foreign policy. Examination of corporate giantism, mass immigration, urban ghettoes, labor unions, and reform movements, and the impact of war and depression, as well as the political responses to these developments. Professor Chambers. Tu Th 10:35-11:50.

[58. Radicalism, Reform, and Reaction in Modern America: 1913 to Today.

Not given in 1976-77.]

W4644y. American Cultural History: from the 1890's to the Great Depression.

Professor Leonard, MW 5:10-6.

W4680v. The United States Between the Two World Wars.

Professor Leuchtenburg, Tu Th 11,

[70. Expanding America: 1941-1971. Professor Chambers. Not given in 1976-77.]

W3133x-W3134y. The United States in the Twentieth Century.

Professor Metzger. Tu Th 1:10-2:25.

W4635x-W4636v. American Intellectual and Cultural History.

Professor Huggins, Tu Th 10.

W4793x-W4794y, American Economic History.

Professor Bruchev. Tu 2:10-4.

W4678x. A History of Black Radicals and Radicalism in the Twentieth Century.

Professor Lynch. Time to be announced.

History-Urban Studies W4673x-W4674y, American Urban History.

Professor Jackson, Tu Th 11-12:15.

W4697x-W4698y. Main Directions in the Foreign Relations of the United States.

Professor Graff. Tu 4:10-6.

SEMINARS, UNITED STATES HISTORY

[55v. Jacksonian America.

Professor Williamson. Not given in 1976-77.]

80x. Anglo-American Perceptions.

An investigation of trans-Atlantic influences, using both English and American primary sources. Among the topics to be considered are: 17th century Puritanism; varieties of Whiggery and Radicalism; movements for democratic and social reform; the imperial experience; 20th century cultural connections and Alliance politics. Permission of the instructor required. Professor Koss. M 2:10-4.

W3883x. Views of Human Nature in American Society since 1850.

Exploration of ways in which changing views of human nature affected American attitudes toward social change in the last century. Specific attention to images of criminals,

History

immigrants, children, women, Blacks, workers, and business men. Professor Rosenberg. W 2:10-4.

81. History of Women in America to 1890.

An examination of important historical and literary sources for the study of American women from colonial times to 1890. Permission of the instructor required. Professor Baxter. Th 2:10-4.

[82. History of Women in America since 1890. Professor Baxter. Not given in 1976-77.]

W3832y. Military History and Policy.

The emphasis will be on the period 1860-1945 with a special focus on the American Civil War and World Wars I and II. Professor Jackson. W 12:10-2.

W3963y. Comparative Revolutions.

Anglo-American Revolutionary tradition, the French Revolution, socialist and communist revolutions, and colonial liberation movements. Professor Onuf. Time to be announced.

W3932x, Cultural Rebels in America: 1890-1929.

Modernism in the arts and radicalism in politics; the social and intellectual history of American dissent before the Great Depression. Professor Leonard. M 4:10-6.

W3958x. What is Cultural History?

The theory of cultural history that has developed since the Second World War; the practice of cultural history in recent scholarship on 19th century America. Professor Leonard. W 11-12:50.

W3950x-W3951y. World War II: 1919-1948.

The literature of the coming and carrying out of World War II. The emphasis will be not only upon the American involvement but all the major belligerents. Professor Shenton. Tu 4:10-6.

61. American Historiography.

The art and craft of American historians from Puritan to modern times. Permission of the instructor required. Professor Williamson. Th 2:10-4.

83. American Intellectual History: From the Revolution to the Civil War.

An examination of the major intellectual themes—and their institutional manifestations—in the United States, including the American Enlightenment, the ideology of the Founding Fathers, the assertion of cultural independence; the Jacksonian temper; Transcendental and millenarian thought; racism and abolitionism. Professor McCaughey. 2:10-4.

[65. History of Education in the United States. Not given in 1976-77.]

71y. The Higher Learning in America.

The English college model and the American colonial context; the antebellum college and the egalitarian imperative. The emergent university as refuge and catalyst; the embattled multiversity and the contemporary predicament. Professor McCaughey. Tu 2:10-4.

[78. American Wartime Dissent: 1775-1972.

Professor Chambers. Not given in 1976-77.]

W3943x. Constitutional History.

Early American legal and constitutional development will be considered in historical context. Concern with the origins of political and legal systems will be subordinated to analyses of their social and economic impact. Professor Onuf. Time to be announced.

W3940y. American Legal History

Professor Rosenberg, M 4:10-6.

History-Urban Studies W3946y. Patterns of Urban and Suburban Growth in the Growth of the United States: 1825-1950.

Emphasis on transportation, technology, residential movements, and political connection, Professor Jackson, Tu 2: 10-4.

C3923x-C3924y. The Civil War and Reconstruction: 1840-1877.

Readings and research in the social, economic, political and military affairs of the United States before, during, and after the Civil War. Professor Shenton. Tu 4:10-6.

[86. Progressivism in Peace and War: 1901-1920.

Professor Chambers. Not given in 1976-77.]

[75. Franklin D. Roosevelt and the New Deal. Not given in 1976-77.]

[76. Franklin D. Roosevelt and Foreign Affairs. Not given in 1976-77.]

C3935x. Black Urban America.

An historical examination of all major aspects of Black life in American cities since emancipation. Professor Lynch. Th 4:10-6.

W3940y. The Problems of War in American Culture, 1856-1930.

The cultural impact of modern armed forces: responses to military technology and organization; shifting perceptions of armed violence, especially in American literature. Professor Leonard. W 4:10-6.

LECTURES. LATIN AMERICAN AND NON-WESTERN HISTORY

W4851x-W4852y. The Modern History of Southern Asia. Professor Roff. Th 2:10-4.

W4415x-W4416y. History of the Ottoman Turks.

Professor Halasi-Kun. W 4:10-6.

W4840y. The Arab World and Southeast Asia: The Spread of Islam from Earliest Times to the Present. Professor Roff, W 10-11:50.

W4451x. The Mediterranean Basin during the First Centuries of Islam. Professor Dunlop. M 10-11:50.

W4471x. History of the Arabs: 1800-1914.

Prerequisite: Permission of the instructor. Professor Dunlop. Th 9-10:50.

W4467y. Persian Political, Social, and Cultural History in Ancient Times. Professor Yarshater. Th 4:10-6.

W4779x-W4780v, History of Latin American Civilization.

W4779x, Professor Spalding, F 10-11:50, W4780y, Professor DellaCava, Th 2:10-4.

Afro-American Civilization W3001x-W3002y. Introduction to the History and Culture of the Black Man in Africa and the Americas from Ancient Times to the Present.

W3001x. Professor Irwin. M W 11-12:15. W3002y. Professor Lynch. Tu Th 1:10-2:25.

W3128y. History of Africa: 1800-1960.

Professor Irwin, MW 11-12:15.

W4911x. History of Central Africa.

Professor Wright. Tu Th 12-12:50.

W4907y. History of East Africa.

Professor Wright, Tu Th 12-12:50.

SEMINAR. LATIN AMERICAN AND NON-WESTERN HISTORY

W3948y. A History of the Caribbean in the Twentieth Century.

A critical examination of the main political, economic, and social currents in the English-, French-, and Spanish-speaking islands to the present. Professor Lynch. Tu 7:10-9.

SEMINARS. INTRODUCTORY AND SENIOR RESEARCH

89. Introductory Seminars.

I. Law and Society in the Early Middle Ages.

The permutations of law reflecting changes in social and cultural conditions in the Germanic kingdoms from the 5th to the 11th century. Introduction to research in the history of Roman and Germanic judicial systems and family law. Professor Wemple. Th 2:10-4.

90. Introductory Seminars.

[I. History and Psychoanalysis.

Professor Levy. Not given in 1976-77.]

91-92. Senior Research Seminar in European History.

Students will conduct individual research, in consultation with the instructor, on subjects in European thought and society of particular interest to themselves. The result of each project will be presented in seminar discussion in the form of the Senior Essay. Open to senior majors; others by written permission of the instructor. Professor Levy. Tu 4:10-6.

93-94. Senior Research Seminar in American History.

Individual research in diverse aspects of American history and presentation of results in seminar discussion in the form of the Senior Essay. Open to senior majors; others by written permission of the instructor. Professor Williamson. Tu 2:10-4.

99x, 99y. Independent Study.

Members of the Department.

C3951x-C3952y. Supervised Research in History.

Permission of Departmental Representative required.



Studies in the Humanities

This program, not to constitute a major, is supervised by the Committee on Studies in the Humanities.

Professor of French

Maurice Z. Shroder, Chairman

Professor of Philosophy

Mary Mothersill

Associate Professor of English

Anne Prescott

Associate Professor of Religion

Elaine Pagels

Assistant Professor of Art History

Joseph Masheck

The following courses are designed to permit students to broaden their knowledge of the humane tradition and to complement the kinds of specialization inherent in a major program.

Except where prerequisites are indicated, all courses are open to freshmen.

[1. The Faust Theme in Literature and Music.

Professor Peters. Not given in 1976-77.]

[4. Autobiography and Confession.

Professor Shroder, Not given in 1976-77.]

6x. The Homosexual in Literature.

Professor Gustafson, Not given in 1976-77.]

[7v. Class and Self in Modern European Literature.

Professor Gavronsky, Not given in 1976-77.]

8. Literary Explorations of Justice.

Divine and human justice, as they are portrayed in drama and in fiction, from antiquity to the present; some consideration of theories of justice. Readings from Aeschylus, Sophocles, Shakespeare, Melville, Carroll, Dostoevsky, Chekhov, Kafka, and Camus. Dr. Terry. Tu Th 9:10-10;25.

[9. The Concept of Death. Professor Mothersill. Not given in 1976-77.]

10. Drama and Ritual.

The development of religious dramatic forms, from primitive ritual to the contemporary theatre. Special attention will be given to the early Church tropes and medieval play cycles and their influence upon modern religious drama. Selected readings from the Bible, medieval miracle and morality plays, Jonson, Bunyon, Calderon, Claudel, Yeats, Brecht, and Eliot. Miss Castaños. W 2:40-4:30.

[11. Visions of War: Literary, Ideological, and Psychoanalytical Perspectives.

Professor Peters. Not given in 1976-77.]

13. Oriental Encounters: The American Experience.

Oriental classics of India, China, and Japan viewed through the perceptions of Emerson, Thoreau, Whitman, Eliot, Pound, Merton, Kerouac, Ginsberg, and Snyder. The *Bhaga-vadgita*, the *Dhammapada*, Zen dialogues and other sources relevant to the work of these writers, Professor Miller. Tu 2:10-4, plus conference hours.

14. The Western Mind in Revolution: Six Reinterpretations of the Human Condition.

Major reinterpretations of the human condition from the sixteenth to the twentieth centuries through the perspective of intellectual revolutions in astronomy (Copernicus: the heliocentric universe), theology (Luther: the Reformation), biology (Darwin: evolution of the species), sociology (Marx: Communism), psychology (Freud: psychoanalysis), and physics (Einstein: theory of relativity). Professor Peters. M W F 1:10.

Humanities V3003x-V3004y. Readings in European and American Literature and Philosophy of the Nineteenth and Twentieth Centuries.

The disintegration of traditional canons in ethics and aesthetics and the attempt to reestablish values in a world where their justification has become increasingly individual or relative. Works by Byron, Pushkin, Stendhal, Büchner, Kierkegaard, Flaubert, Melville, Eliot, Tolstoy, Dostoevsky, Nietzsche and Chekhov read in the first semester, and in the second, by James, Mann, Proust, Joyce, Yeats, Eliot, Woolf, Faulkner, Kafka, Sartre, Robbe-Grillet and García Marques. Prerequisite: a grade of B or better in Humanities C1001-C1002 or permission of the instructor. Professor Kurrik (V3003x) and Professor Selig (V3004y). M W F 1:10.

The following departmental courses are included in this Interdepartmental Offering. For complete descriptions consult appropriate department listings.

Classical Literature 32, Classical Myth.

Classical Literature V3123x. Greek Drama and Its Influences.

[English 58. Medieval Literature.]

[English 83. Modern Literature and the Allied Arts.]

English 86. Modern Drama.

[History 37. The European Enlightenment.]

History 50x. Utopia and Its Hinterlands.

[History-Italian V3199x. Petrarch's World.]

History-Italian V3197x. Dante's World.

Oriental Humanities V3399x-V3400y. Colloquium.

Oriental Studies V3403y. Forms of Art in India.

[Philosophy 34. The Concept of Beauty.]

Philosophy 43, 44. Philosophical Implications of the Modern Novel.

Philosophy 61. Greek Philosophy.

Spanish 41. The Spanish Inquisition: Dissent and Conformity.



Interdepartmental Offerings

EXPERIMENTAL COLLEGE 1, 2. Experiment in Self-Structured Learning.

Evaluation of the learning process, through a student-initiated program of independent study. Students must work with faculty sponsors either individually or in a group. Project proposals are due by the final program filing date. Enrollment is limited to forty students, and no more than two terms in Experimental College 1, 2 may be credited toward the degree. Permission of the instructor required. Professor Eisenstein. W 2:10-4.

EXPERIMENTAL COLLEGE 3. Contemporary Feminist Thought.

Contemporary feminist thought as set forth in the writings of Simone de Beauvoir, Mary Ellman, Elizabeth Janeway, Kate Millett, Juliet Mitchell, Sheila Rowbotham, and others. The course will examine shared assumptions, significant ideological differences, and some broader issues raised by these works. Limited to 25 students. Permission of the instructor required. Professor Eisenstein, M 2:10-4.

EXPERIMENTAL COLLEGE 4. Experimental Education.

A theoretical approach to some of the issues raised by the experimental education movement, with emphasis on the "culture" of the traditional classroom—competition, roleplaying, authority, "tracking," and other elements—as a model for some other social institutions. Registration limited to 25. Permission of the instructor required. Professor Eisenstein. M 2:10-4.

INTERDEPARTMENTAL COURSE 4. Determinants of Sexuality.

Biological and psychological foundations of maleness and femaleness emphasizing references from Endocrinology and Psychiatry. Psychoanalytic, social learning, and cognitive developmental theories. Current clinical data on human sexual differentiation in the life cycle. Alternative biological and psychological expressions of sexuality; chromosomal abnormalities, hormonal modifications, sexual dysfunctions, homosexuality, transsexualism. Traditional evolutionary, phylogenetic and socio-anthropological perspectives will not receive primary consideration. Drs. Mogul and DeFries. M W 1:10-2:25.



Professor

Maristella de Panizza Lorch (Chairman; 206 Milbank Hall)

Instructor

Maria Grazia DiPaolo

Other officers of the University offering courses listed below:

Professors

John C. Nelson, Olga Ragusa, Luciano Rebay

Assistant Professor

Pelligrino D'Acierno

A major in Italian is expected to attain (a) sufficent knowledge of the language to enable her to read, write, and speak it, (b) a fundamental acquaintance with Italian literature, (c) ability to understand and interpret literary texts in Italian.

· Courses: A minimum of ten courses, exclusive of language courses, to be planned as early as possible in consultation with the department; Course V3993x-V3994y.

Allied subjects: In consultation with their major adviser students should select courses in other languages and literatures, music, art history, philosophy, and religion.

The major examination consists of four hours of written work and an oral examination.

Foreign Language Requirement for the Degree: All new students who intend to satisfy the foreign language requirement in Italian must take a placement examination before registration. This examination tests the student's knowledge of grammar, her ability to comprehend written and spoken Italian, and her ability in free composition. Students receiving a sufficiently high grade will automatically fulfill the requirement. All others may do so by completing a full-year literature course, given in Italian, or Course V3334y with a minimum grade of B+.

Casa Italiana: The Casa Italiana, located on Amsterdam Avenue at 117th Street, is open to all students interested in Italian culture and literature. A program of films, lectures, concerts, plays, poetry recitations, and informal gatherings is organized to meet the students' needs. Professor Lorch directs the program of the Casa.

LANGUAGE COURSES

V1101x-V1102y. Elementary Full-Year Course.

An integral course for beginners with intensive oral-aural drill. Reading, translation, conversation. May not be taken simultaneously with elementary Spanish. No credit is given for Course V1101x until Course V1102y has been completed. Work in the language laboratory for one hour weekly is optional. Sections Ia and Ib. M Tu W Th 9. Sections IIa and IIb. M Tu W Th 12.

V1201x-V1202v, Intermediate Course.

A review of the essentials of grammar; intensive and extensive reading, particularly from contemporary authors; translation, composition, and practice in conversation. Prerequisite: Course V1101x-V1102y or the equivalent. Section I. M Tu W Th 10. Section II. M Tu W Th 12.

V1301x-V1302y. Comprehensive Elementary and Intermediate Course.

For linguistically gifted students who wish to acquire by intensive study the reading skill necessary to interpret Italian literary texts. Permission of the Chairman required. Miss Di Paolo, Section I, M W F 11-12:15. Section II. M W F 4:10-5:25.

With the permission of the chairman of the department, this course may be applied toward the fulfillment of the language requirement, provided it is followed by a one-year course in Italian literature.

[V3335x-V3336y. Italian Written and Oral Style. Not given in 1976-77.]

LITERATURE COURSES IN ITALIAN

For nonmajors, the literature courses listed below will count toward the general college requirement. All courses are conducted in Italian.

V3333x-V3334y. Introduction to Literary Study [in Italian].

Introduction to literary theory and problems and to in-depth textual analysis. Authors and works from the thirteenth century to the present. The basic course in Italian literature. Prerequisite: Course V1201-V1202 or the equivalent. V3333: Professor Ragusa. V3334: Professor Nelson, M W 2:40-3:55.

V3449x-V3450y. Modern Italian Literature.

Nineteenth and twentieth century prose and poetry. Professor Rebay. MW 1:10-2:25.

[W3451x. The Sonnet: A Study of Poetic Structure.

Professor D'Acierno. Not given in 1976-77.]

V3641y. The Italian Theatre and Its Contribution to European Theatre.

Commedia dell'arte, dialect theatre, and melodrama. Professor Lorch. Tu Th 2:10-3:25.

V3993x-V3994y. Seminar in Italian Literature.

Guidance in research and writing of a critical essay. Required of majors. Open to other qualified students with permission of the Chairman. Professors Lorch, Nelson, Ragusa, and Rebay. Hours to be arranged.

COURSES GIVEN IN ENGLISH

Majors are required to attend an additional seminar hour conducted in Italian in those courses so indicated below.

[V1122y. Studies in the Italian Renaissance.

Professor Lorch. Not given in 1976-77.1

[V1134y. Studies in Medieval Romance Literature.

Professor Nelson. Not given in 1976-77.]

[V3196y., Petrarch and Boccaccio.

Not given in 1976-77.]

History-Italian V3197x. Dante's World.

The historical background of Dante's political, social and ethical thought and literary analysis of its poetical rendering. Major theological themes in Medieval thought as a background to and influence upon the *Divine Comedy*. Development of visual arts and ideas especially in the painting of Giotto. Guest lecturers: Professor Cousins (Religion) and Professor Davis (Art History) will be invited to participate. Professors Lorch and Wemple, Tu 12:10-2. Third hour to be arranged.

[V3221x. Machiavelli, Castiglione, Ariosto, Tasso.

Professor Nelson. Not given in 1976-77.]

V3223x. Florentine Writers from Dante to Michelangelo.

Interrelations between Dante, Petrarch, and Boccaccio; Lorenzo de'Medici and his circle; Machiavelli and Guicciardini; Michelangelo and Cellini. Professor Nelson. Tu 2:10-3:50. Third hour: Th 2:10-3 for students with a knowledge of Italian; Th 3:10-4 for students without a knowledge of the language.

V3453x-V3454y. Modern Italian Thought: Vico, Croce, Gramsci.

V3453: Vico: a close reading of the *New Science*; its influence on modern thought and literature. V3454: Croce and Gramsci: Croce's neo-idealism and Gramsci's critique of it; their theories of history and art; their relationship to Vico and Marx. Professor D'Acierno. Tu Th 4:10-5:25.

[V3465x-V3466y. Italian Civilization and Culture.

Professor D'Acierno. Not given in 1976-77.]

[V3642v. Studies in Contemporary Italian Arts: Italian Film.

Professor Lorch, Not given in 1976-77.]

English-Italian C3358y. Artistic Theory in the Renaissance.

An examination of a selected number of texts (in translation) on artistic thoery—Alberti, Vassari, Leonardo, among others—and consideration of their importance to the history of art and literary criticism, with special attention to the critical terminology used. Professor Selig. M W 11-12:15.

[W4001x. Interrelations of Italian Literature and Culture.

Professor Ragusa. Not given in 1976-77.]

GRADUATE COURSES

Certain graduate courses given in the University are open to qualified majors with the consent of the chairman of the department. The following courses are described in the Bulletin of the Graduate School of Arts and Sciences.

G4052v. The Italian Novel.

Professor Ragusa. Th 4:10-6.

G4074v. Montale.

Professor Rebay. Tu 4:10-6.

G4075x-G4076y. Dante.

G4075: Professor Nelson; G4076: Professor Lorch. W 10-11:50.

G4088y. Italian Literature of the Sixteenth Century.

Professor Nelson. Th 10-11:50.

CL-Fr-It G4771x. The Poetry of Giuseppe Ungaretti: its French and Italian Origins.

Professor Rebay. Tu 4:10-6.



Linguistics

Professor

Joseph L. Malone (Chairman; 412A Milbank Hall)

Assistant Professor

Richard Wojcik

Other officers of the University offering courses listed below:

Assistant Professors

Alan S. Castleman, Michael J. Reddy

The purpose of the study of linguistics is to develop understanding of the nature of language. The major is designed to provide the student with a broad appreciation of the fundamental problems of language analysis, some training in the techniques of linguistics research, as well as insight into the interrelations of linguistics with the other social and communicational sciences, the humanities, and philosophy and mathematics.

Required courses for the major in linguistics are (I) Linguistics V1101, V3203, V3206, V3901, and one other 3000-level linguistics course, and (II) three courses in linguistics and/or post-intermediate language to be chosen in consultation with the adviser. In addition to these requirements each student must plan with the adviser a program of breadth and specialization studies.

V1101x or y. Introduction to Linguistics.

The nature of language. Characteristics of phonological and grammatical systems and the lexicon. Evolution of language. Role of linguistics in related disciplines. Modern techniques of linguistic analysis. V1101x. Professor Wojcik. M W 11-12:15. V1101y. Section I. Professor Malone. Tu Th 9:10-10:25. Section II. Professor Wojcik. Tu Th 7:40-8:55.

V3203x. Synchronic Linguistics.

Varied approaches to problems in synchronic linguistics, selected to emphasize critical points in linguistic theory. Prerequisite: Linguistics V1101. Professor Malone. Tu Th 9:10-10:25.

[V3206y. Historical Linguistics. Not given in 1976-77.]

[V3301y. The Structure of a Language. Not given in 1976-77.]

[V3303x. Linguistic Analysis. Not given in 1976-77.]

V3406y. Semantics and Figurative Language.

Introduction to basic semantics, with emphasis on the operation and role of figures of speech in language evolution, ordinary language, and literary art. Prerequisite: Linguistics V1101 or permission of the instructor. Professor Reddy. Hours to be arranged.

V3408x. Language Acquisition.

Problems of the emergence of various strata of linguistic knowledge in children: the development of structural means for expressing and understanding intents (early stages); mastery of more complex hierarchical and linear relations manifested by linguistic subsystems (later stages). Prerequisite: Linguistics V1101 or permission of the instructor. Professor Wojcik. M 2-4.

V3901y. Seminar in Linguistics.

Supervised research in the student's area of specialization; preparation of a research paper. Prerequisite: the linguistics major, and senior standing. Professor Malone. W 9-10:50.

W4050y. Introduction to Generative Grammar.

Basic principles of syntax and phonology as practiced by generative grammarians. Introduction to current theoretical trends with implications for the future. Practice in data analysis. Prerequisite: an introductory course in linguistics or permission of the instructor, Professor Wojcik, M 6-8 p.m.

W4204v. Introduction to Phonology.

Basic concepts and issues in phonological theory. Critical examination of the development of the phonemic and morphophonemic levels of representation. Prerequisite: Linguistics W4201 or permission of the instructor. Professor Wojcik. M W 12-1:15.

W4500x-W4501y. Generative Syntax.

Principles and analytic techniques of generative syntax; formal and substantive aspects of transformations, base, lexicon, and semantic interpretation; generative syntax and generative semantics. Permission of the instructor required. Professor Wojcik. Tu Th 12-1:30.

W4502x. Generative Phonology.

Principles and analytic techniques of generative phonology; mutual relations of underlying representation and phonetic interpretation; formal and substantive aspects of phonological rules and of phonotactic conditions. Prerequisite: Linguistics V1101 or permission of the instructor. Professor Malone. Tu 10:35-12:25.

OTHER LINGUISTICS COURSES

For full descriptions, please consult the Columbia College Bulletin.

W4004x. Linguistics and the Verbal Arts. Professor Austerlitz. M 6-8 p.m.

W4107x. Linguistic Geography. Professor Herzog. Tu 2:10-4.

W4201x. Phonetics. Professor Austerlitz. M W 10.

W4601x. Semantic Systems. Professor Reddy. M 3:10-5.

W4801y. Language as Communication: Synchrony. Professor Diver. W 2:10-4.

W4901x. The Learner's Grammar and Language Teaching.

Mr. Juhasz. Th 3:10-4:50.

W4902y. Contrastive Grammar and the Teaching of English.

Mr. Juhasz. Th 3:10-4:50.

Anthropology V3033x. Sociolinguistics. Professor Attinasi. Tu Th 6:10-7:25.

Anthropology V3034y. Ethnolinguistics. Professor Attinasi. Tu Th 6:10-7:25.

Anthropology W4160y. Dialectology in Contemporary Society.

Professor Attinasi. Th 3:10-5.

URALIC LANGUAGES (Finnish and Hungarian)

Please consult the bulletins of the Graduate School of Arts and Sciences and the School of General Studies.

YIDDISH LINGUISTICS AND LITERATURE

Please consult the bulletins of Columbia College, the School of General Studies, and the Graduate School of Arts and Sciences.

Mathematics

Professor

Joan S. Birman (Chairman; 514 Mathematics)

Other officers of the University offering courses listed below:

Professors

Hyman Bass, Lipman Bers, Patrick X. Gallagher, Hervé M. Jacquet, Ellis Kolchin, Masatake Kuranishi, Wilfried Schmid

Associate Professor

Dennis Heihal

Joseph Fels Ritt Assistant Professors

Julian Eisner, William Pardon, Henry Pinkham, Douglas C. Ravanel, Bernard St. Donat, Diana Shelsted, R. Theodore Smith, Domingo Toledo.

The systematic study of mathematics begins with one of the following two-term sequences: V1101-V1102 (referred to below as Calculus IA, IIA), V1103-V1104 (Calculus IB, IIB), V1107-V1108 (Calculus IC, IIC), V1201-V1202 (Calculus IIIA, IVA), or Section II of V1203-V1204 (Calculus IIIB, IVB).

The A-sequence calculus is a standard course devoted to the differential and integral calculus. It is intended for students who need calculus primarily for its applications. The B- and C-sequence calculus courses cover the same basic material as the A-sequence. However, the B-sequence stresses more heavily the theoretical foundations, while the C-sequence stresses theory and in addition demands creative imagination and an unusual ability to think abstractly. All students who wish to take Calculus IC, IIC must take a qualifying examination administered by the Department of Mathematics during Freshman Week. Students not seeking to enter Calculus IC who have recently taken the Level I or Level II Mathematics Achievement Tests of the College Board, are placed on the basis of their Achievement Test scores. Students intending to take Calculus IA should consult the bulletin board outside 609 Mathematics within a period of three days before the beginning of classes for information on classroom assignments.

Students who are not adequately prepared for any calculus course must take one of the non-credit offerings (see below) to make up their deficiencies in background.

Advanced placement is awarded on the following basis: A score of 3, 4, or 5 on the Advanced Placement Test in Calculus A-B earns credit for one course and admission to Calculus IIA or IIB. A score of 4 or 5 on the Calculus B-C exam earns credit for two courses and admission to the freshman section of IIIB. A score of 3 on the Calculus B-C exam earns credit for one course and admission to Calculus IIIB, as above, but with course credit to be increased to two courses upon successful completion of Calculus III with a grade of C or better. A freshman who qualifies for Calculus IIIB, and intends to major in mathematics, should consult a member of the department for individual advice about whether to enroll in IIIB or IC.

In most of the courses, the lectures are supplemented by recitation periods which meet once a week in small groups. Assignments to recitation sections are made *after* the first lecture.

Students who wish to transfer from one division of Calculus to another are allowed, with the approval of the departmental representative, to do so beyond the date specified in the Academic Calendar. They are considered to be adjusting their level, not changing their program.

Students who major in mathematics are required to complete ten courses. These must include: Calculus I-IV (the B- or C-sequences are strongly advised), V3040-V3041,

W4061-W4062. Students who are contemplating graduate studies in mathematics are also urged to take at least one semester of V3951-V3952, and to acquire a reading knowledge of two of the three languages: French, German, and Russian. All majors are encouraged to take courses in allied fields, such as physics, chemistry, mathematical statistics, and computer science. None of these may be counted toward the ten courses required for a major in mathematics.

Senior mathematics majors are required to participate in one of the undergraduate seminars V3951x or V3952y.

Students who are interested in planning a major in mathematical statistics or computing science may petition the Committee on Programs and Academic Standing for such a major, after obtaining the approval of the Chairman of the Mathematics Department.

V1001x-V1002y. Introduction to Basic Concepts of Mathematics.

A terminal course for students not intending to continue the study of mathematics. A glimpse into the world of mathematics and its applications. Although the material is elementary, it is approached from a thoroughly contemporary scientific point of view. Prerequisite: high school mathematics through intermediate algebra. V1001 is prerequisite for V1002. Section I. Instructor to be announced. M W F 10. Section II. Professor Smith, Tu Th 6:10-7:25.

V1101x, V1102y, or V1102x, V1101y. Calculus IA and IIA.

Functions. Limits, Derivatives. Examples. Applications (motion, curve tracing, maxima and minima). Mean value theorem. Integrals. Integration by parts and substitution. Applications (area, volume, length, work, energy). Elementary transcendental functions. Applications (radioactive decay, vibrations). Taylor's theorem with remainder. Prerequisite: trigonometry. V1101x, V1102y. Professors Gallagher, Ravanel, and others to be announced. Section I. MWF 11; Section II. MW 1:10-2:25; Section III. Tu Th 11-12:15. V1102x, V1101y. Professors Toledo, Goldberg, Kuranishi, and others to be announced. Section I. MWF 11; Section II. Tu Th 6:10-7:25 p.m. An additional recitation hour will be scheduled after the first meeting of the class.

V1103x, V1104y. Calculus IB and IIB.

The same material as Course IA, IIA, with greater emphasis on the understanding of the mathematical concepts and the logical structure. Professors Eisner and St. Donat. M W F 11. Recitation sections: Tu or Th, 8 or 12.

V1104x, V1203y. Calculus IIB and IIIB.

Prerequisite: A course in differential calculus. Instructor to be announced. M W F 11. Recitation Sections: Tu or Th, 8 or 12.

V1107x, V1108y. Calculus IC and IIC.

The same material as Course IA, IIA. The terminology and style are thoroughly modern. Intended for students who have facility with discussion on an abstract level, or who appear likely to develop such facility early. Professor Pinkham. M W F 11.

V1201x, V1202y, or V1202x, V1201y. Calculus IIIA and IVA.

Vector valued functions. Functions of several variables. Examples. Partial derivatives. Chain rule and the gradient. Multiple integrals. Various coordinates. Line and surface integrals. Vector analysis. Infinite series. Power series. Applications. Prerequisite: Calculus II for IIIa, III for IVA. V1201x, V1202y. Section I. Professor Morgan and instructor to be announced. Tu Th 11-12:15. Recitation sections: M or W, 8 or 12. Section II. Professor Pardon. Tu Th 1:10-2:25. Recitation sections: Tu 2:40-3:55 or Th 4:10-5:25. V1202x, V1201y. Professor Goldberg. Tu Th 6:10-7:25. Recitation sections: Tu 7:40-8:55 or Th 4:10-5:25.

V1203x, V1204y. Calculus IIIB and IVB.

The same material as Calculus IIIA, IVA, with greater emphasis on the understanding of the mathematical concepts and the logical structure. Prerequisite: Calculus IIB or the equivalent for IIIB, Calculus IIIB for IVB. Section I. Professor Morgan. Tu Th 11-12:15. Recitation sections: M or W, 8 or 12. Section II. Professor Kulkarni. M W F 11. (Freshman section.) Recitation sections: Tu or Th, 8 or 12.

V1204x. Calculus IVB.

Prerequisite: Calculus IIIB. Professor Kulkarni. Tu Th 11-12:15. Recitation sections. M or W, 8 or 12.

V1207x, V1208y. Calculus IIIC and IVC.

The material of Calculus IIIA, IVA, plus additional topics, as time permits. The terminology and style are thoroughly modern. Prerequisites: Calculus IIC for IIIC,. Calculus IIIC for IVC. Professor Jacquet. Tu Th 11-12:15.

V2040y. Number Theory.

Congruences, quadratic residues, Gaussian sums. Number-theoretic functions. Distribution of primes. Irrational, algebraic, and transcendental numbers. Prerequisite: Calculus II. Professor Goldberg. Tu Th 9:10-10:25.

V3005x, V3006y. Advanced Calculus for Science Majors.

This course completes the basic calculus sequence and supplies the essential groundwork for applications to physics and engineering. Elements of linear algebra. Power series. Taylor expansions, Chain rule, Change of variables in multiple integrals. Line and surface integrals. Green's and Stokes' theorem. Implicit function theorem. Differentiation of series and integrals. Orthogonal expansions: Fourier series, Legendre polynomials, Bessel functions. Complex analysis: Cauchy-Riemann equations, Cauchy theorem, Residue theorem with applications to contour integrations. Either term may be taken separately. Prerequisite: Calculus IV. Professor Toledo. Tu Th 2:40-3:55.

V3007x. Complex Variables.

An elementary course in functions of a complex variable. Complex numbers, analytic functions, Cauchy-Riemann equations. Cauchy integral theorem, Taylor and Laurent series, poles and essential singularities, conformal mapping. Professor Eisner. M W 1:10-2:25.

V3010x. Fundamental Concepts of Mathematics.

The groundwork on which almost all modern mathematics rests. Sets, mappings, relations, ordered sets, well-ordering, natural numbers, cardinal numbers, ordinal numbers, choice functions, Zorn's lemma, induction, real and complex numbers. Prerequisite: Calculus IV and at least one 3000 course. Professor Eisner. M W 10.

V3027x or y. Differential Equations.

Solutions of ordinary differential equations: linear equations with constant coefficients, series solutions at regular and singular points. Boundary value problems. Qualitative theory of nonlinear equations. Selected applications. Prerequisite: Calculus IV or equivalent. Autumn Term. Professor Pardon. Tu Th 6:10-7:25. Spring Term: Instructor to be announced. M W F 10.

V3028y. Partial Differential Equations.

Introduction to partial differential equations. First-order equations. Linear second-order equations; separation of variables, solution by series expansions. Boundary value problems. Further topics chosen by the instructor. Prerequisite: Course V3027x or equivalent. Professor Pardon, Tu Th 6:10-7:25.

V3040x, V3041y. Introduction to Modern Algebra.

Introduction to groups, rings, fields, with examples. Polynomials, algebraic number fields, the Galois theory and applications. Prerequisite: Calculus IV. Exceptionally well

prepared students may, with permission of the instructor and the Chairman, take this course after completing Calculus IIB or IIIB. Professor Ravanel, MW 2:40-3:55.

W4061x, W4062y. Introduction to Modern Analysis.

The real numbers. Metric spaces. Elements of general topology. Continuous functions. Implicit function theory. Measure and integration. Change of variables in integration. Banach spaces and Hilbert spaces. Bounded operators. Examples and applications. Further topics chosen by the instructor. Prerequisite: Calculus IV or the equivalent. Professor Shelsted. M W 4:10-5:25.

V3202y. Linear Algebra.

Vector spaces, linear transformations, matrices, quadratic and hermitian forms, reduction to canonical forms. Prerequisite: Calculus II or the equivalent. Primarily for majors in mathematical statistics, the physical sciences, biology, and the social sciences. Professor Smith. Tu Th 10, W 12.

V3375v. Geometric Topology.

The fundamental group, Seifert-Van Kampen theorem, covering spaces, classification of 2-manifolds, simplicial homology. This course is intended primarily for mathematics majors, Prerequisites: V3040 and W4061. Professor Birman, M W 2:40-3:55.

V3386v, Differential Geometry,

Local and global differential geometry of submanifolds of Euclidean 3-space. Frenet formulas for curves. Various types of curvatures for curves and surfaces and their relations. The Gauss-Bonnet theorem. Prerequisite: Calculus IV or equivalent. Professor Smith. Tu Th 4:10-5:25.

V3901x-V3902v. Supervised Readings in Mathematics.

Guided reading and study in mathematics. A student who wishes to undertake individual study under this program must present a specific project to a member of the staff and secure his willingness to act as sponsor. Written reports and periodic conferences will be required. Permission of the Chairman and of the staff member who agrees to act as sponsor are required. The staff. Hours to be arranged.

V3951x-V3952y. Undergraduate Seminars in Mathematics.

The subject matter is announced at the start of registration and is different in each section. Each student prepares talks, to be given to the seminar, under the supervision of a faculty member or senior teaching fellow. Prerequisite: two years of calculus and at least one year of additional mathematics courses, and the permission of the department chairman. Professor Stux and staff. Hours to be arranged.

Computing Science W3001x and W3001y. Introduction to Computing Science.

Basic programming skills and their use in such applications as teaching, literature, law and political science. Emphasis on learning to recognize the kinds of problems amenable to computer solution. Data simulation, learning machines, and compilers. Problems for solution on a computer teletype in the language BASIC. Primarily, but not exclusively, for students in the humanities and social sciences. Laboratory fee: \$15. W3001x. Professor Toledo. Tu Th 1:10-2:25. W3001y. Instructor to be announced. M W 1:10-2:25.

Computing Science W3002y. Computing and Finite Mathematics.

Introduction to mathematical programming methods, both for natural sciences and social sciences. Numbers and their representations, equation solving, numerical integration, matrix inversion. Simulation, linear programming. Information processing, sorting, retrieval and list structures. No prior computing experience necessary. Prerequisite: one term of calculus or permission of the instructor. Professor Toledo. Tu Th 1:10-2:25.

Mathematical Statistics G4105x. Probability.

Fundamentals; random variables and distribution functions in one or more dimensions;

Mathematics

the binomial, normal, and Poisson distributions; combinatorial problems; moments and characteristic functions; stochastic convergence and the law of large numbers; addition of random variables and limit theorems; the chi-square, t, and F distributions. Prerequisite: Calculus IV. Instructor to be announced. M W 5:40-6:30.

Mathematical Statistics G4107y. Statistical Inference.

Principles of statistical decision procedures. Point estimation. Unbiased consistent, efficient, and sufficient estimates. Method of maximum likelihood. Testing hypotheses. Normal, binomial, and Poisson distributions. Prerequisite: G4105. Professor Sigmund. M W 5:40-6:30.

GRADUATE COURSES

Certain graduate courses given in the University are open to qualified majors with the consent of the major adviser. These courses are described in the Bulletin of the Graduate School of Arts and Sciences.

NO CREDIT OFFERINGS

The following courses are offered without credit toward the degree.

V0075x or y. Basic Techniques, I.

An intensive introduction to basic algebra. Students proceed at their own pace, receiving classroom, audio-visual, and individual instruction. The Staff. Section I. M W 6:10. Section II. Tu Th 4:10. Section III. Tu Th 6:10. Section IV. Tu Th 7:00.

V0076x or y. Basic Techniques, II.

A course in basic algebra for students with some facility in mathematics. An introduction to solving both algebraic and verbally formulated problems. Prerequisite: some knowledge of high school algebra as shown on the Calculus I placement test, or V0075 or its equivalent. The Staff. Section I. M W 7:00. Section II. Tu Th 4:10.

V0077x or y. Pre-calculus.

This course is intended primarily for students seeking further scientific training. Elements of trigonometry and advanced algebra; notions of mathematical proof; functions. Prerequisite: knowledge of basic algebra as demonstrated by the Calculus I placement test, or completion of V0076 or its equivalent, or recommendation of the instructor of V0075. The Staff. Section I. M W 4:10. Section II. Tu Th 6:10. Section III. M W 7:00.



Medieval and Renaissance Studies

This program is supervised by the Committee on Medieval and Renaissance Studies:

Professor of Italian

Maristella Lorch, Chairman

Professor of Art History

James Beck

Professor of English

Barry Ulanov

Professor of History

John Mundy

Associate Professor of English

Joan Ferrante

Associate Professor of French

Tatiana Greene

Associate Professor of Greek and Latin

Lydia Lenaghan

Associate Professor of History

Suzanne Wemple (Adviser)

Associate Professor of Religion

Elaine Pagels

Assistant Professor of English

Anne Prescott

It will be supported by a University-wide group of consultants.

The purpose of this program is to provide an understanding of Medieval and Renaissance civilizations on the basis of interdisciplinary studies. Students will take related courses in various departments. The programs will be set up *individually* with particular emphasis on one of the disciplines: art history, history (which will combine Medieval and Renaissance Studies), one or more of the literatures, philosophy, romance philology, music, or religion.

Prerequisite for Medieval Studies: History 3. The Early Middle Ages, and History 4. The High Middle Ages.

Prerequisite for Renaissance Studies: History 4. The High Middle Ages, and History 13. The Italian Renaissance, or depending on the field of concentration, History 13. The Renaissance, and History 14. The Reformation in Europe in the Sixteenth Century.

Language requirement for Medieval Studies: A reading knowledge of one Romance or Germanic language. In special cases students may petition for another language. Students are expected to acquire a reading knowledge of Medieval Latin before graduation. (See Course 13-14 and Latin 33y.)

Language requirement for Renaissance Studies: A reading knowledge of two languages, preferably Latin and Italian, must be acquired before graduation.

Required courses: A minimum of eight one-semester courses within the general area of Medieval or Renaissance civilization, including courses listed below. Of these, at least three or four must be advanced courses in the field of concentration.

A mimeograph list of relevant courses is available in Professor Wemple's office, 413 Lehman Hall.

Medieval and Renaissance Studies

[1. Introductory Seminar. The Restoration of Antiquity and the Revival of Letters. Not given in 1976-77.]

History-Italian V3197x. Dante's World.

The historical background of Dante's political, social and ethical thought and literary analysis of its poetical rendering. Major theological themes in Medieval thought as a background to and influence upon the *Divine Comedy*. Development of visual arts and ideas especially in the painting of Giotto. Guest lecturers: Professor Cousins (Department of Religion) and Professor Davis (Art History Department) will be invited to participate. Professors Lorch and Wemple. Tu 12:10-2. Third hour to be arranged.

[13-14. Junior Readings in the Original. Not given in 1976-77.]

Latin 33y. Medieval Literature.

A survey of representative late Latin and Medieval texts; readings from the Church Fathers, sacred and secular lyric, history, romance, satire, and biography. Practice in paleography. Prerequisite: Three semesters of college Latin or permission of the instructor. Professor Lenaghan. M W F 11.

90. Senior Seminar.

A close examination of texts central to the continuity and reappraisal of Medieval and Renaissance traditions. Readings will be linked to the student's experience in various fields and will provide a context for the preparation of a senior thesis which reflects the interdisciplinary aim of the program.

Preliminary work on the thesis is to be done in the preceding semester in a colloquium or senior-level seminar in the student's special discipline selected during the spring term of the junior year in consultation with the instructor of Course 90. Members of the staff. Hours to be arranged.



Professor

Hubert Doris

Associate Professors

Patricia Carpenter¹ (Chairman; 406 Milbank Hall), Jacques-Louis Monod

Instructor

Peter Schubert

Other officers of the University offering courses listed below:

Professors

Jack Beeson, Joel Newman, Ernest H. Sanders, Howard Shanet, Valdimir Ussachevsky

Assistant Professors

Charles Dodge, Dennis Rilev

Lecturers

Christopher Hatch, Piero Weiss

Associate

Niels Østbye

¹Absent on leave, Autumn Term,

A major in music is designed to integrate music as an art and a craft within the framework of the liberal arts.

A student intending to major in music should start with Courses V2100x and V3123x as early as possible. Course 1-2, though a prerequisite for more advanced literature courses, is not required of music majors, since they cover the same type of material in greater depth in the courses already required of them.

A major in music is required to take the following courses: V2100-V2101, V2300-V2301, V2303, V2305, V3123, V3124, V3125, V3126, V3179-V3180 and V3373-V3374. Applied music (a maximum of one course) may be counted toward the degree but is not required.

Other fields: A reading knowledge of German, Italian, or French is required. Students planning to do graduate work in musicology, or ethnomusicology, must know at least two foreign languages, including German and French. Courses in art history, history, philosophy, literature, and foreign languages are recommended for their relationship with musical studies, and should be elected after consultation with the department.

Students are advised to consult the Bulletin of the Graduate School of Arts and Sciences for those courses open to seniors and others with advanced training.

Students planning to major in music will be expected to file with the department certificates stating that they have passed an examination in elementary piano. A student found deficient in piano techniques is required to take supplementary piano lessons until an appropriate level of proficiency at the keyboard has been reached, such proficiency to be certified by Mr. Østbye no later than the end of the first term of the senior year. As with other applied music activities, these lessons will carry the equivalent of one quarter academic credit per semester.

Majors must have participated for two years in the chorus, orchestra, choir, concert band, collegium musicum, chamber music, or other musical ensembles by the time they are graduated.

²Absent on leave, Spring Term.

A senior major is required to prepare a research paper or project, to be planned in consultation with her adviser no later than the beginning of the senior year.

The Program in the Arts: Those students contemplating a career in performance or composition should see the announcement on the Program in the Arts, pages 56-58.

Practice rooms: The department provides practice rooms at a nominal charge. Preference in assigning hours is given in order of application to music majors and those enrolled in courses given by the department. Application for practice time should be made at the Office of Buildings and Grounds, Milbank Hall: during registration and the first week of classes by music majors, and by all others during the week following.

Library: Books, scores and records are available at the Barnard College Library. The Columbia University Music Library contains an extensive collection of music materials for reference, research, and circulation. In addition, phonographs with a large collection of recordings are also available for use by students registered in music courses other than Course 1-2:

LITERATURE AND HISTORY

1-2. An Introduction to Music.

A study of the elements of musical structure designed to form intelligent listening habits, and of the several great epochs of music, with emphasis on their style and structure. No previous knowledge of music is required. This course is not designed for students majoring in music. Mr. Schubert and instructor to be announced. Section I. M W F 2:10. Section II. Tu Th 10:35-11:50.

[V1004x. Literature of the Pianoforte.

Professor Doris. Not given in 1976-77.]

V1005y. The Opera.

A survey of the development of opera from Monteverdi to the present, Prerequisite: Course 1-2 or the equivalent. Professor Beeson, MW 1:10-3. One hour is a listening hour.

V1006x. The Symphony.

A survey of symphonic style and structure from 1750 to the present. Prerequisite: Course 1-2 or the equivalent. Professor Sanders. M W 1:10-3. One hour is a listening hour.

V1007x. Music of the World's Peoples.

An introduction to musical practices of the world, excluding the tradition of Euro-American classical music. Prerequisite: Course 1-2 or the equivalent. Instructor to be announced. Tu Th 1:10-3.

V1008y. Twentieth Century Music.

A survey of contemporary music from the late 19th century to the present. Prerequisite: Course 1-2 or the equivalent. Instructor to be announced. Tu Th 1:10-3. One hour is a listening hour.

V1015y. American Music.

A survey of music in America from Colonial times through the 1950's. Attention is given to the interrelationships among folk, "entertainment," and art music. Prerequisite: Course 1-2 or the equivalent. Professor Newman. Tu Th 2:10-4. One hour is a listening hour.

V1617x, Electronic Music: Its Evolution and Techniques.

A comprehensive survey of electronic music from 1948 to 1968, with detailed analysis of compositional techniques and their evolution and application by various groups and individual composers. Technical procedures employed in creating sound materials are discussed. Prerequisite: Music V2101 or the equivalent and written permission of the instructor, Professor Ussachevsky, Tu 2:10-4.

[V3021y. Schoenberg. Professor Carpenter. Not given in 1976-77.]

[V3042. Aesthetic Disciplines in Music. Professor Carpenter. Not given in 1976-77.]

V3123x, History I.

Western music to the early sixteenth century. Prerequisite or corequisite: Music V2100 or the equivalent. Section I. Instructor to be announced. M W 1:10-3. One hour is a listening hour. Section II. Professor Newman. Tu Th 5:40-7:30. One hour is a listening hour.

V3124v. History II.

Western music from the early sixteenth to the end of the seventeenth century. Prerequisite: Music V3123 or permission of the instructor. Section I. Instructor to be announced. M W 1:10-3. One hour is a listening hour. Section II. Professor Newman. Tu Th 5:40-7:30. One hour is a listening hour.

V3125x. History III.

Western music from the end of the seventeenth century to the early nineteenth century. Prerequisite: Music V3124 or permission of the instructor. Section I. Professor Weiss. M W 2:10-4. One hour is a listening hour. Section II. Instructor to be announced. Tu Th 5:40-7:30. One hour is a listening hour.

V3126v. History IV.

Western music from the early nineteenth century to the mid-twentieth century. Prerequisite: Music V3125 or permission of the instructor. Section I. Professor Doris. M W 2:10-4. Section II. Instructor to be announced. Tu Th 5:40-7:30. One hour is a listening hour.

V3179x-V3180y. Seminar. Historical and Analytical Studies in the Literature of Music.

Required seminar for senior majors to supplement and coordinate previous studies. Prerequisite: three years of the theory sequence, two years of the history sequence, and Music V3373-V3374, or written permission of the instructor. V3179x. Section I. Professor Doris. W 4:10-6. Section II. Professor Newman. Th 3:10-5. V3180y. Section I. Professor Beeson. W 4:10-6. Section II. Professor Carpenter. Th 3:10-5.

THEORY

V1329x, y. Musicianship.

The basic elements of music are studied with the aim of developing musicianship. Prerequisite: Placement examinations will be given at the first class meeting. Section Ia. Mr. Hatch. Sections Ib and Ic. Instructors to be announced. Tu Th 4:10-5:25.

All students taking the Music Theory sequence (V2100 through V2305) must take a placement examination in ear-training, and must satisfy the ear-training requirement either through the placement examination or the completion of the Ear-training sequence V2000 through V2003. These courses do not carry credit toward the degree.

V2000x and y. Ear-training, Level I.

Intervals, rhythms, and melodic lines, for dictation and sight-singing. Section Ia. Mr. Schubert, Section Ib. Instructor to be announced. Tu Th 9.

V2001x and y. Ear-training, Level II.

Three- and four-tone chords and simple passages, for dictation and sight-singing. Prerequisite: V2000 or equivalent achievement in the ear-training placement examination. Sections Ia and Ib. Instructors to be announced. Tu Th 9.

V2002x and y. Ear-training. Level III.

Cadences and chord progressions, for dictation and sight-singing. Prerequisite: V2001 or equivalent achievement in the ear-training placement examination. Instructor to be announced. M W 9.

V2003x and y. Ear-training. Level IV.

Modulations and extended musical passages, for dictation and sight-singing. Prerequisite: V2002 or equivalent achievement in the ear-training placement examination. Sections la and lb. Instructors to be announced. M W 9.

V2100x-V2101y. Theory I and II.

Principles of counterpoint; model species counterpoint. Diatonic harmony. Permission of the instructor required. Corequisite: appropriate level of ear-training sequence (until completion of sequence), as indicated by placement examination. Section Ia. Professor Monod. Section Ib. Instructor to be announced. Tu Th 10:35-11:50. Lab. Tu Th 12. Sections IIa and IIb. Instructors to be announced. M W 5:40-6:55. Lab. M W 7.

V2300x-V2301y. Theory III and IV.

Tonal counterpoint, including double counterpoint, canon, and fugue. Chromatic harmony. Prerequisite: V2100-V2101 or the equivalent. Corequisite: appropriate level of ear-training sequence (until completion of sequence), as indicated by placement examination. Section I. Professor Dodge. M W F 10. Section II. Instructor to be announced. Tu Th 1:25-2:40, Section III. Professor Riley. M W 5:30-6:45.

V2303x. Theory V.

Twentieth-century musical practices, including investigation of coherence in non-tonal music. Prerequisite: V2300-V2301 or the equivalent. Corequisite: appropriate level of ear-training sequence (until completion of sequence), as indicated by placement examination. Section I. Professor Monod. Tu Th 1:10-2:25. Section II. Mr. Hatch. Tu Th 5:40-6:55.

V2305y. Theory VI.

Analysis, principles of design, texture, rhythm, and the organization of musical detail as revealed through a study of compositions selected from several periods of music history. Prerequisite: V2303 or equivalent. Corequisite: appropriate level of ear-training sequence (until completion of sequence), as indicated by placement examination. Section 1. Professor Monod. Tu Th 1:10-2:25. Section 11. Mr. Hatch. Tu Th 5:40-6:55.

V3239x-V3240y. Composition.

Composition in the smaller forms, for voice, chorus, piano, organ, and pieces for violin or other instruments with piano. One course credit is given for the two semesters. Prerequisite: V2301 or written permission of the instructor. Instructor to be announced. Tu 1:10-3.

V3241x-V3242y. Advanced Composition.

A continuation of Music V3239x-V3240y. Prerequisite: V3239x-V3240y and permission of the instructor. Professor Riley. W 1:10-3.

V3373x-V3374y. Orchestration, Conducting, and Score-Reading.

Lectures and practice in orchestration and score-reading, supplemented by practical demonstrations of instruments. Prerequisite: V2101 or the equivalent. Section I. Professor Riley. M W F 11. Section II. Instructor to be announced. Tu Th 5:40-6:55.

PERFORMANCE ACTIVITIES (APPLIED MUSIC)

A detailed description of the following activities is given in A Guide to Barnard.

Academic credit, granted by petition at end of the semester, amounting to one quarter of a course per semester is given for participation in the following activities, with the exception of Music for an Hour.

Audition and rehearsal schedules for all activities will be posted outside the Columbia departmental office, at least a week before registration.

UNIVERSITY ORCHESTRA AND CHAMBER MUSIC.

Professor Shanet and staff. Auditions: during registration week by appointment, Room 703 Dodge. Rehearsals: M 5:30-7:30 on the stage of McMillin Theatre, and M W F 5:30-7:30 in the three weeks preceding each concert.

BARNARD-COLUMBIA CHORUS.

Mr. Schubert, Rehearsals: Th 6-8 p.m. in Room 405 Milbank Hall.

UNIVERSITY BANDS.

Mr. Nierenberg. Auditions: Concert Band, during registration week and by appointment. Rehearsals: Tu Th 4-6.

COLLEGIUM MUSICUM.

This organization acquaints the student with certain neglected and unfamiliar masterpieces of vocal and instrumental music not heard in concerts elsewhere. Music majors are particularly urged to attend the meetings and to participate in performances.

MUSIC FOR AN HOUR.

This series of informal chamber concerts, held the last Tuesday in every month in the James Room of Barnard Hall, is designed to give all interested instrumentalists a chance to perform for the University community. All those interested in participating should consult the department.

INSTRUMENTAL INSTRUCTION.

Written permission from Professor Carpenter is required.

Oriental Studies

Professor

John Meskill (Chairman; 321A Milbank Hall)

Associate Professor

Barbara Stoler Miller

Other officers of the University offering courses listed below:

Professors

Ainslie T. Embree, H. Paul Varley, Alex Wayman, Herschel F. Webb, Ehsan Yarshater

Associate Professors

Kathleen Burrill, Gari K. Ledyard, Maan Z. Madina, Theodore Riccardi, Jr.

Senior Lecturer

Jeanette Wakin

Assistant Professors

Dale L. Bishop, Carol N. Gluck, David G. Johnson, Krikor Maksoudian, James M. Polachek, Kathryn W. Sparling, Marsha L. Wagner

The primary aim of Oriental Studies is to introduce major Asian civilizations, their works and values, as a means of expanding knowledge of the varieties and unities of human experience. The General Courses below are designed for any student, whatever her major interests, who wishes to include knowledge of Asian life in her education.

Foreign Language Requirement for the Degree: The satisfactory completion of one of the following courses offered in the departments of East Asian Languages and Cultures and Middle East Languages and Cultures satisfies the requirement in the respective languages: Akkadian G4204y, Arabic W1122y, Armenian W1124y, Chinese G4006y, Hebrew W1122y, Hindi F1122y, Japanese W4006y, Persian W1122y, Sanskrit G6102y, or Turkish W1122y.

Literature courses in the departments of East Asian Languages and Cultures and Middle East Languages and Cultures in which readings are in the original languages may be used to fulfill the Barnard general requirement (2) only with the permission of the Chairman of Oriental Studies.

Students who wish to enter Chinese or Japanese language courses above the introductory level *must* pass a language placement test before registering. Placement exams are given during the week *before* classes begin—contact Department of East Asian Languages and Cultures (407 Kent) for exact dates. For placement above the introductory level in Arabic, Hebrew, Persian, Sanskrit, or Turkish, contact Department of Middle East Languages and Cultures (609 Kent).

To major in Oriental Studies, a student will choose to follow one of two tracks, East Asian or Middle East.

The East Asian Track.

- (a) As a prerequisite, to be completed by the end of the sophomore year, Oriental Civilizations V3355x-V3356y or any two of the following courses: Oriental Civilizations V3359y, Oriental Civilizations V3361x, and East Asian V3201y.
- (b) Four to six courses of an appropriate language; details to be explained by the adviser.
- (c) Four courses on East Asia chosen from among those listed below or, with the adviser's permission, from the listings of other departments (Oriental Humanities V3399x-V3400y may be substituted for one of the courses in this category).
- (d) Two courses chosen from among East Asian seminars, East Asian W4103y, East Asian W4101x, and Oriental Studies 99x, 99y.

The Middle East Track.

- (a) Middle East—Oriental Civilizations V3102x-V3103v.
- (b) Four to six courses of an appropriate language; details to be explained by the adviser.
- (c) Five or six courses chosen as a concentration. The concentration may be in ancient Semitic languages and cultures, Arabic studies, Armenian studies, Central Asian studies, Hebrew language, Indian studies, or Iranian studies. The courses required in each of the concentrations and other details will be explained by the adviser. The courses listed under Middle East below represent a selection among those required in one or another of the concentrations. See also the note on Graduate Courses at the end of this section.

A student who plans to major in Oriental Studies is advised to consult a member of the department in the spring semester of her freshman year. Upon completion of her program she will be prepared for further study in graduate school or some related professional training.

Majors in the program come under the administration of the Committee on Foreign Area Studies. For admissions procedures and other details, see page 86.

GENERAL COURSES

Oriental Civilizations V3355x-V3356y. Introduction to the History and Culture of Oriental Societies.

The more important factors in the life of people of India, China, and Japan, and an appraisal of their role in the world today. Autumn Term: The evolution of these civilizations to recent times, emphasizing their characteristic institutions and intellectual traditions. Spring Term: Developments in the nineteenth and twentieth centuries as these societies have confronted the problems of modernization. Fourth hour: Lectures and audio-visual illustrations. Prerequisite: One course in history or permission of the instructor. Professor Meskill and staff, M W F 11. Fourth hour W 12.

Middle East-Oriental Civilizations V3102x-V3103y, Civilizations of the Middle East.

A survey of dominant patterns in the civilizations of Semitic, Indo-European, and Turkic-speaking peoples of the Middle East, from ancient to modern times. Autumn Term: geography, cultural identity, law, social order, authority. Spring Term: literature, art, religion, Western contacts. Professor Bishop and members of the Department of Middle East Languages and Cultures. Time to be announced.

Oriental Civilizations V3357x, Introduction to the Civilization of India.

A multidisciplinary introduction to Indian civilization, traditional and modern, with substantial attention to art and literature. Professor Embree. Tu 10-12, W 12:10-1.

Oriental Civilizations V3359y. Introduction to the Civilization of China.

The evolution of Chinese civilization from ancient times to the twentieth century, with emphasis on institutional, cultural, and intellectual patterns. Professor Meskill. Tu 2:10-3, Th 2:10-4.

Oriental Civilizations V3361x. Introduction to the Civilization of Japan.

The development of Japanese society and culture from the sixteenth century to the present, with special attention to national self-image and values as revealed in thought, institutions, literature, and the arts. Professor Webb. Tu 2:10-3, Th 2:10-4.

Oriental Civilizations V3001x-V3002y. Introduction to Islamic Civilization.

Autumn Term: An examination of Islamic civilization. Its institutional and intellectual characteristics in A.D. 1800. Spring Term: Important factors, such as the impact of the West and nationalism, on the Islamic peoples from 1800 to the present. Professor Maksoudian. Time to be announced.

- [Oriental Studies V3379x. Readings in Oriental Studies. Professor Meskill. Not given in 1976-77.]
- [Oriental Studies V3507x. Seminar on Comparative Studies in Asian Civilizations. Not given in 1976-77.]

Oriental Humanities V3399x-V3400y. Colloquium.

A reading and discussion of major works of Oriental literature, social philosophy, and religion which have helped shape the view of man, the human condition, disciplines of self-cultivation, and man in society in the Islamic world, India, China, and Japan. Autumn Term: works from the Near East and India. Spring Term: works from China and Japan. Open to juniors and seniors who have completed two courses of literature and one course of philosophy or religion, or have written permission of an instructor. Professors Johnson, Meskill, Miller, and staff. Section I. Tu 2:10-4. Section II. W 4:10-6.

[Oriental Studies V3402y. Mythologies of Southern Asia. Professor Miller. Not given in 1976-77.]

Oriental Studies V3403y. Forms of Art in India.

Dominant erotic themes in Indian poetry, drama, painting, and sculpture will be studied in the contexts of classical Sanskrit esthetic theory and mystical love poetry of devotional Hinduism. Professor Miller. Tu 2:10-4. Conference hour to be arranged.

[Oriental Studies V3509y. Oriental Thought. Professors Danto and Embree. Not given in 1976-77.]

Oriental Studies 99x, 99y. Independent Study.

Specialized reading and research projects will be planned in consultation with members of the Oriental Studies teaching staff. Open to majors who have fulfilled basic major requirements on written permission of the staff member who will supervise the project. Hours to be arranged.

EAST ASIAN

East Asian V3201y. Introduction to East Asian Civilization: Korea and Vietnam.

A survey of Korean and Vietnamese history and culture, including a comparative analysis of the special problems of the "buffer" states within East Asia in both traditional and modern times. Professor Ledyard. M W 4:10-5:25.

East Asian V3415x. Elite and Popular Culture in Traditional China.

An investigation of the content of the "great" and "little" traditions and their interaction in Chinese literature, society, politics, and religion from early times to the 19th century. Professor Johnson. M W 2:40-3:55.

East Asian V3420y. Chinese Social and Political Ideology in Transition: 1850-1975.

Major trends in Chinese social and political ideology, stressing the evolution from West-ern-inspired criticism and protest to new orthodoxies, as revealed in 19th and 20th century Chinese journalism and fiction, in translation. Professor Polachek. Tu Th 1:10-2:25.

East Asian V3540x. Processes of Modernization in China and Japan. (formerly Oriental Studies V3508)

A comparative analysis of the modernization process in China and Japan in the last century, focusing on intellectual and cultural change. Professors Polachek and Varley. Tu 2:10-4.

East Asian V3510x. Chinese and Japanese Poetry.

Close reading of selected poetry from the *Book of Songs* to *haiku*, in translation, contrasting Chinese, Japanese, and Western literary theories and poetic traditions. Limited to 25 students. Professor Wagner. Tu Th 4:10-5:25.

East Asian V3520y. Two Great Novels and Their Worlds: Tale of Genji and Dream of the Red Chamber.

A study of the two masterpieces of Japanese and Chinese fiction in translation, and through them a close look at the societies which they reflect. Limited to 25 students. Professors Sparling and Wagner, M W 2;40-3;55.

East Asian V3620x. Epochs of Japanese Culture.

History of the major epochs of Japanese culture. Emphasis will be placed on tracing the continuity of aesthetic development and on patterns of cultural borrowing from China in premodern times and the West in the modern period. Professor Varley. M W 1:10-2:25.

East Asian V3610y. Social Change Reflected in the Literature and Films of Modern Japan. (formerly Oriental Studies V3380)

Changes in society and values during the modernization of Japan from the mid-nine-teenth century until the present, using literature, diaries, essays, popular culture, and films as source materials. Professor Gluck, Tu Th 11.

East Asian W4103y. Historiography of East Asia.

Major issues in the practice of history illustrated through comparative reading of major works by occidental and oriental historians, with special emphasis on China. Permission of instructor required. Professor Johnson. F 2:10-4.

East Asian W4101x. Critical Approaches to Chinese and Japanese Literature.

An investigation of principles of literary criticism developed in China and Japan, contrasted with Western literary theory. Emphasis on the application of these critical methods to selected works of Chinese and Japanese poetry and prose. Permission of instructor required. Professor Wagner. Tu Th 1:10-2:25.

MIDDLE EAST

Middle East W4404y. Islamic Literature in Translation.

Professor Burrill, Tu Th 1:10-2.

Arabic W4302x. Emergence of the Arab Nationalist Idea.

Professor Madina, W 10-11:50.

History W4826x. History of Modern South Asia.

Professor Embree. W 4:10-6.

Islamic-Religion W4101x. Mysticism in Islam.

Professor Yarshater. Time to be announced.

Armenian W4101x-W4102v. Introduction to Armenian Civilization.

Professor Maksoudian. Time to be announced.

Turkish G4111x, Turkish Folk Literature.

Professor Burrill, Tu 2:10-4.

[Middle East W3010x. History of Astrology in the Ancient and Classical World. Professor Wayman. Not given in 1976-77.]

Islamic W4452x. Islamic Law.

Mrs. Wakin. Tu 2:10-4.

Indic G4102y. History and Cultures of the Himalayan Area.

Professor Riccardi. Time to be arranged.

Iranian W4241y. History of Persian Literature before Islam.

Professor Bishop, Time to be announced.

Persian W4602x. Introduction to Persian Literature.

Professor Yarshater. Time to be announced.

Oriental Studies

Semitic G4501x-G4502y. The Bible and Modern Scholarship.

Instructor and time to be announced.

General courses related to Oriental Studies:

Anthropology V3013x. Village India.

Professor Klass.

[Political Science 24. Asian Politics. Professor Dalton. Not given in 1976-77.]

Religion V1102x or V1102y. Introduction to the Study of Religion: Eastern Religions.

See section assignments.

Also note offerings under Eastern Religions in the Religion Department.

ORIENTAL LANGUAGE COURSES

Language courses are offered through the departments of East Asian Languages and Cultures and Middle East Languages and Cultures. Consult the listings of these departments in the Columbia College and Graduate School of Arts and Sciences bulletins for detailed descriptions of courses. Three or more years of language instruction, beginning at the elementary level, are offered in Arabic, Armenian, Chinese, Hindi-Urdu, Japanese, Persian, Sanskrit, Turkish.

GRADUATE COURSES

Certain graduate courses given in the University may be taken by majors, with the consent of the major adviser, to supplement department offerings. Consult the Bulletin of the Graduate School of Arts and Sciences for listings.



Professors

Sue Howard Larson (Chairman; 326C Milbank Hall), Mary Mothersill¹

Lecturer

David A. J. Richards

Assistant Professors

Jeffrey Miles Blustein, Onora Sylvia O'Neill

¹Absent on leave, 1976-77.

The major in philosophy is designed to develop competence in techniques of conceptual analysis and to acquaint the student with the major areas for investigation in traditional and contemporary philosophic theory.

Within the limits of the prerequisites described below, philosophy courses may be taken in any sequence: the numbers assigned to particular courses indicate roughly the level of competence expected of students. (Transfer students who wish to count courses taken elsewhere as prerequisites for Barnard courses must have written permission from the Chairman of the Philosophy Department and may be required to take a placement test.)

A student who majors in philosophy is required to take the following courses or their equivalents: 1; 6; 9 or 77; two courses in the history sequence, V3350, V3351, V1103, V1104, 37, 39, 61; one elective course; and in the senior year, the seminar, 87-88. Philosophy majors are urged to satisfy the logic requirement as early as possible and must do so no later than the Spring term of their junior year.

1x or 1v. Introduction to Philosophy.

Interpretation and analysis of major topics in ethics, metaphysics, theory of knowledge. Readings from historical and contemporary sources. Section I. Professor O'Neill. M W F 9. Section II. Instructor to be announced. M W F 10. Section III. Professor Larson. M W F 11. Section IV. Professor Blustein. Tu Th 10:35-11:50.

6. Logic.

Presented as a formal science, logic will be distinguished from the methodology of the empirical sciences. Analysis of the formal elements of classical logic will be followed by an introduction to symbolic logic. Instructor to be announced. M W F 1:10.

9. Ethics.

An introduction to the central problems of moral philosophy. Among the topics covered are: action and reasons for action; pleasure and pain; obligation, rights and duties; alternative moral ideals; the use of moral language. Prerequisite: Course 1 or permission of the instructor. Instructor to be announced. Tu Th 10:35-11:50.

29v. Philosophy of Law.

An examination of the intersection of law and morals in constitutional law, including such topics as racial and sexual discrimination, school financing, reapportionment, homosexuality, abortion, obscenity, rights of access to the media, minimal welfare rights. Readings from Rawls, Hart, Richards, and selected legal materials. Dr. Richards. M 2:10-4, Conference hours to be arranged.

[34. The Concept of Beauty. Professor Mothersill. Not given in 1976-77.]

V3350x. Descartes, Spinoza and Leibniz. (formerly 35)

A systematic analysis of concepts central to seventeenth century Rationalism. The focus is on problems in epistemology and metaphysics discussed in relationship to logical theory and philosophy of science. Prerequisite: Course 1 or permission of the instructor. Professor O'Neill, M W F 10.

V3351y. Locke, Berkeley and Hume. (formerly 36)

A study of the principal topics of British Empiricism. Problems discussed include: Sense perception and innate ideas, the foundations of empirical knowledge, substance and cause, personal identity, freedom of the will, the grounds of political authority, justice and obligation. Prerequisite: Course 1 or permission of the instructor. Professor Blustein. M W F 10.

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Philosophy

V1103x, V1104y. The History of Philosophy.

Either term may be taken separately. Exposition and analysis of the positions of the major philosophers. V1103: Thales through St. Augustine. V1104: St. Thomas through Kant, Professor Walsh, M W 2:40-3:55.

[37. Twentieth Century Philosophy. Professor Blustein. Not given in 1976-77.]

43, 44. Philosophical Implications of the Modern Novel.

Autumn Term: Russian, French, German Existentialist philosophers and novelists. Philosophical themes, to be studied in literary form: the death of God, the collapse of bourgeois morality, alienation from society, the disintegrating ego, the quest for personal identity. Texts include Pascal, Kierkegaard, Dostoevsky, Nietzsche, Jaspers, Heidegger, Sartre, Camus, Beckett. Professor Peters. M W F 1:10. Spring Term: The role of ideas in works of imaginative literature. Readings in Joyce, Gide, Bergson, Proust, Sartre, Greene, West, Kawabata and Mishima. Either term may be taken separately. Instructor to be announced. M W F 1:10.

61. Greek Philosophy.

An introduction to Greek philosophy, with some attention to its relations to modern thought. Topics and readings include: the beginnings of science and philosophy in pre-Socratic thought; Socrates as teacher and moralist; Plato and the *Dialogues* (especially *Symposium, Meno, Republic, Timaeus*); Aristotle's metaphysics and ethics; Stoic and Epicurean cosmology and moral theory; Plotinus and the origins of Western mysticism. Instructor to be announced. M W F 1:10.

72. Ethics and Medicine.

A philosophical examination of some of the moral issues that have arisen in medical theory and practice. Topics to be discussed will be drawn from the following: right to receive health care treatment, euthanasia, abortion, experimentation on human subjects, behavior control, allocation of scarce medical resources, and eugenics. Readings from philosophical, medical, and legal literature. Prerequisite: Course 1 or 6 or permission of the instructor. Professor Blustein. Tu Th 2:40-3:55.

76x. Social Philosophy. Seminar.

A systematic exposition of the concepts of liberty, equality, and fraternity with particular attention to the question of compatibility of these ideals. Selected readings from Hobbes, Rousseau, Mill, Marx, and contemporary authors. Prerequisite: Course 1 or 6 or 9 or permission of the instructor. Professor Blustein. M W F 12.

77. Theory of Knowledge. Seminar.

An examination of some central problems. Among the topics covered are: contrasting traditions with respect to the structure and basis of knowledge and the justification of belief; conceptions and criteria of truth; induction and its justification; necessary truth and a priori knowledge; types of empirical knowledge. Readings from classical and contemporary sources. Prerequisite: Course 1 or 6 or permission of the instructor. Professor Blustein. Tu Th 2:40-3:55.

79y. Theory of Meaning

Consideration of the problems of constructing a theory of meaning for a natural language. Readings from Frege, Tarski, Quine, Davidson, Austin and others. Prerequisite: Course 1 or 5 or permission of the instructor. Professor Larson. M W F 2:10.

V3123x. Metaphysics. (formerly 82)

An analytical survey of several major topics selected from the following: theories of causation, the mind-body problem, and the status of persons in nature, natural theology, the nature of existence, and the problem of minerals, the nature of conceptual schema. Usually, one major metaphysical system, for example, Spinoza's, is selected for examination. Prerequisite: Course 1 or permission of the instructor. Professor Larson. M W F 2:10.

84. Philosophy of Education.

Philosophical presuppositions of intellectual and moral education. Examination of topics such as innate ideas; natural moral characteristics; permissiveness; "free" schooling; "deschooling"; material and moral incentives. Readings will include selections from Plato, Rousseau, Piaget, Dewey, Chomsky, Illich, Neil, and current periodical literature. Not open to freshmen. Professor O'Neill. M W F 1:10.

87-88, Senior Seminar.

An intensive study of selected philosophical classics. Discussions, oral reports and term papers. Required of all majors in their senior year. Autumn Term. Professor O'Neill. Spring Term: Professor Larson. W 4:10-6. Conference hours to be arranged.

99x, 99y. Supplementary Readings in Philosophy.

To be taken only with the consent of the instructor and permission of the department.

[Studies in the Humanities 9. The Concept of Death.

Professor Mothersill. Not given in 1976-77.]

COLUMBIA COLLEGE AND SCHOOL OF GENERAL STUDIES COURSES

C1101x or y. Methods and Problems of Philosophic Thought.

C1101x. Professor Danto. Tu Th 11-12:15. C1101y. Professor Sidorsky. Tu Th 11-12:15. Limited to 75 students.

C1110y. The Functions of Philosophy.

Professor Frankel, MW 11-12:15.

C1201x. Ideology and Society.

Professor Teitelman, Tu Th 2:40-3:55.

W3039x, Existentialism.

Professor Cumming. M W 4:10-5:25. Limited to 35 students.

W3107x, Moral Philosophy.

Professor Teitelman, Tu Th 1:10-2:25.

C3117x or y. Formal Logic.

C3117x. Professor Steiner. M W F 9. C3117y. Professor Higginbotham. Tu Th 1:10-2:25.

W3118y. Philosophy of Science.

Professor Stein, Tu Th 2:40-3:55.

W3120x. Twentieth-century Philosophy.

Professor Sidorsky, Tu Th 2:40-3:55.

W3127x. Nineteenth-century Philosophy.

Professor Geuss. Tu Th 4:10-5:25.

C3128x. Method and Metaphysics in the Development of Physical Theories.

Professor Stein, MW 4:10-5:25.

W3177x. Philosophy of Language.

Professor Higginbotham. Tu Th 11-12:15.

C3188v. Theory of Knowledge.

Professor Levi. Tu Th 1:10-2:25.

W3220y. Justice.

Miss Weinstein. M W 7:40-8:55 p.m.

W3312y. Aristotle.

Professor Patterson. MW 11-12:15.

W3354x, Philosophy of Mind.

Professor Berofsky, MW 11-12:15.

W3357x. Heidegger.

Professor Cumming. M W 4:10-5:25.

Consult Columbia College Bulletin for course descriptions.

Physical Education

Associate Professors

Marion R. Philips, Jeanette S. Roosevelt

Assistant Professor
Sandra Genter

Associates

Alice Braunwarth, Barbara Fitts, Edith G. Mason

The curriculum is organized and administered by the faculty of the Department of Physical Education in cooperation with the Health Service and the Recreation and Athletic Association. Courses are offered in twenty-five skills in the areas of dance, sports, aquatics, movement, and fitness. Multiple sections are taught in four skill levels — beginning, low intermediate, intermediate, and advanced.

Health Status

The evaluation of the health status of students by the College Physician influences the programs the students elect.

Posture Analysis

Freshman students may elect to have a complete posture analysis with follow-up examinations. A course, Posture Laboratory, P. E. 86, is offered for students who wish to improve body alignment.

Requirement

Completion of two semesters in the freshman year and two semesters beyond the freshman year. Transfer students are required to have two semesters' credit beyond the freshman year. Transfers, who enter as second semester freshmen, must also complete one course in the freshman year at Barnard.

Registration

Students are sent preregistration forms each semester in time to have registration confirmed before filing programs with the registrar. Students must include physical education courses by *number*, *title*, *section* and *sequence number* on final programs to be filed with the registrar. Students who do not preregister may register the first two days of the semester in the gymnasium. Columbia University students, other than Barnard undergraduates, must receive *permission of the Physical Education Department* to register.

Courses

The following courses are offered with the suffix "x" for autumn semester and "y" for spring semester. They are semester courses which have two class sessions per week. The complete schedule of courses is sent to each student and is available in the Physical Education Department, 209 Barnard Hall. Students are advised to register according to their own skill level: Beginner = (A), low intermediate = (B), intermediate = (C), advanced = (D).

AQUATICS COURSES

20x. Life Saving. Miss Braunwarth. MW 3:10-4:30.

21y. Water Safety Instructors Course. Miss Braunwarth. M W 3:10-4:30.

22x or y. Beginning Swimming. (A)

Section I. Miss Braunwarth. M W 12:10. Section II. Miss Fitts. M W 2:10. Section III. Miss Braunwarth. Tu Th 12:10. Section IV. Miss Braunwarth. Tu Th 2:10.

23x or y. Intermediate and Advanced Swimming. (C, D)

Section I. Miss Braunwarth, M W 11. Section II. Miss Braunwarth, M W 1:10. Section III. Tu Th 11. Section IV. Tu Th 1:10.

25x or y. Advanced Aquatics. (D)

Miss Braunwarth, Tu Th 3:10-4:30.

27x or y. Swim-and-Stay-Fit. (D)

Mrs. Mason. Section I. M W 10. Section II. Tu Th 10.

DANCE COURSES

30x or y. Beginning Modern Dance. (A)

Section I. M W 11. Section II. Tu Th 2:40-3:55.

31x or y. Low Intermediate Modern Dance. (B)

Section I. Tu Th 10:35-11:50. Section II. Tu Th 4:10-5:25.

32x or y. Intermediate Modern Dance. (C)

Section I, M W 4:10-5:25.

33x or y. Advanced Modern Dance. (D)

Section I. MW 12:10-1:30, Section II. Professor Genter. Tu Th 12:10-1:30,

35x or y. Beginning Ballet. (A)

Section I. M W 9:00-10:25. Section II. Tu Th 1:40-2:35.

36x or y. Low Intermediate Ballet. (B)

Section 1. M W 3:10-4.

37x or y. Intermediate Ballet. (C)

Section I. Tu Th 9:00-10:25.

38x or y. Jazz Dance. (A, B, C, D) Tu Th 4:10-5:25.

40x or y. Beginning Folk Dance. (A)

Section I. M W 12:10. Section II. M W 1:10

44x or y. Low Intermediate Israeli Dance. (B) M W 2:10.

46x or y. Beginning Tap Dance. (A) Professor Roosevelt. M W 2:10.

SPORTS COURSES

50x or y. Beginning Archery. (A) Mrs. Mason. Tu Th 1:10.

51x or y. Intermediate and Advanced Archery. (C, D) Mrs. Mason. Tu Th 12:10.

53x or v. Badminton. (A, B, C, D) M W 1:10.

55x. Intermediate and Advanced Basketball. (C, D) M W 4:10

55y. Intermediate and Advanced Basketball. (C, D) MW 2:10.

57x or y. Beginning and Low Intermediate Bowling. (A, B)

Section I. Miss Fitts. M W 10. Section II. Miss Fitts. M W 11. Section III. Professor Philips. Tu Th 10. Section IV. Professor Philips. Tu Th 11.

58x or y. Open Hour Bowling. (C, D,)

Professor Philips. Section I. M W 9. Section II. M W 1:10. Section III. Tu Th 1:10.

60x or y. Beginning Fencing. (A) Tu Th 11.

61x or y. Low Intermediate Fencing. (B) Tu Th 12:10

Physical Education

62x or y. Intermediate and Advanced Fencing. (C, D) Tu Th 1:10.

64x or y. Beginning Tennis. (A)

Section I. Professor Philips, M W 11. Section II (x only). Professor Philips. M W 2. Section III, Miss Fitts. Tu Th 10. Section IV. Tu Th 3:10.

65x or y. Low Intermediate Tennis. (B)

Section I. Professor Philips. M W 10. Section II. Miss Fitts. Tu Th 11. Section III. Tu Th 2:10.

66x or v. Intermediate Tennis. (C)

Section I. M W 9. Section II. Tu Th 9.

67x or y. Advanced Tennis. (D) Section I. M W 3:10. Section II (y only). M W 4:10.

70x or y. Volleyball. (A, B, C, D). M W 12:10.

71x or y. Intermediate and Advanced Volleyball. (C, D) Tu Th 4:10

SPECIAL COURSES

80x or y. Beginning Movement Workshop. (A) Professor Genter. M W 11.

83x or y. Beginning Body Conditioning. (A) Section I. M W 10. Section II. Tu Th 10.

86x or y. Posture Laboratory. Professor Roosevelt. M W 1:10.

88x or y. Relaxation. Professor Roosevelt, Tu Th 1:10.

90x or y. Beginning Self Defense. (A) Section I. M W 3:10. Section II. M W 4:10.

93x or y. Beginning Yoga. (A) Section I (x only), Tu Th 10:35-11:50, Section II. Tu Th 12:10.

94y. Intermediate Yoga. (C) Tu Th 10:35-11:50.

98x or y. Varsity Teams. Approval of Director of Athletics required.

COURSES FOR ACADEMIC CREDIT

The following courses are offered for academic credit only. For course descriptions see Dance, pages 66-67.

Dance 61-62. Dance Workshop.

Dance 63. Form in Dance Composition.

Dance 64. Content in Dance Composition.

Dance 65, 66. History of Dance.

[Dance 74. Seminar on Contemporary Dance Forms. Not given in 1976-77.]

[Dance 76. Critical Writing on Dance. Not given in 1976-77.]

Professor

Richard M. Friedberg (Chairman; 503 Altschul Hall)

Visiting Professor

Samuel Devons (Director of History of Physics Laboratory)

Assistant Professor

Sigalia Dostrovsky

Other officers of the University offering courses listed below:

Professors

Charles Baltay, Norman Christ, Henry M. Foley, Paolo Franzini, William Happer, Sven R. Hartmann, Wonyong Lee, Robert Novick, James Rainwater, Malvin Ruderman, Allan M. Sachs, Chien-Shiung Wu.

Assistant Professors

Arthur Becker, Jerome Finkelstein, Rajendra Gupta, Robert Guernsey, Lawrence Price, Erick Weinberg, Martin Weisskopf, Richard Wolff

Lecturer

Joel Groves

The study of physics ranges from preparation for professional work in physics or for the study of other sciences to a more general familiarity with physics and its historical development as part of contemporary culture. Besides a thorough preprofessional curriculum, the departmental offering includes courses using Barnard's History of Physics Laboratory, oriented particularly to the broader perspective.

The department offers four distinct introductory sequences, only one of which may ordinarily be taken for credit.

- 1. V1305x, V1306y and C1001-C1002 are designed for liberal arts students who wish to achieve a qualitative understanding of the science. Either C1001-C1002 taken with 1, 2, or V1305x, V1306y satisfies the science requirement of Barnard College.
- 2. Either V1003, V1004 or V1103, V1104 is satisfactory preparation for medical school. Both cover the same material, but V1103, V1104 is somewhat more intensive and is designed for students majoring in sciences other than physics. Neither course is recommended as a foundation for more advanced work in physics.
- 3. An entering student with a serious interest in physics should enroll in the Autumn Term in C1006x, which begins a four-term sequence (C1007y or C1107y, C1011x, C1012y) leading to more advanced courses. (These introductory courses may be taken without laboratory by nonmajors. See the Columbia College catalogue for the appropriate course numbers.)
- 4. Freshmen with exceptional aptitude for physics and a good mathematical background may be admitted into the two-semester sequence, C1021, C1022, which replaces the first three terms of the sequence starting with C1006. Admission is by special interview with the instructor. A student interested in this course should, if possible, attend the "Physics Placement Meeting" announced in the Columbia College Freshman Week Program.

The major includes C1006, C1107, C1011, C1012 or C1021, C1022, C1012, with lab in either case; W3003, W3007, W3008, G4003, G4015, G4016, and at least one more semester at the G4000 level; W3072, W3083, and six additional hours of intermediate lab (W3081 and 11, 12) of which at least four hours must be in W3081. Four terms of calculus are essential, and some additional work in mathematics is recommended. The program should also include a year of chemistry, although in some instances astronomy

or biology may be substituted. The major examination consists of the Undergraduate Record Examination in physics and a one-hour oral examination.

V1305x, V1306y, Discovery and Experiment in Physics.

Topics in the history of physics with experimental work in the History of Physics Laboratory. Critical study of primary sources and discussions on historic experiments in physics from the 17th to the 20th century. This course fulfills the Barnard science requirement. It is oriented primarily to non-science students. Enrollment limited to 36 students. Permission of the instructor required. Professor Dostrovsky. Lec. Tu Th 1:10-2:25. Lab. (2 hours) Tu 2:35-4:25, W 2:10-4, Th 2:35-4:25.

C1001x, C1002y. Elementary Physics.

An introductory treatment of the major discoveries and theories of physics and their historical development. C1001: classical (17th century) physics. C1002: contemporary (20th century) physics. This course does not fulfill the physics requirement for admission to medical school. It is primarily addressed to non-science students. This course together with Physics 1, 2 fulfills the Barnard science requirement. Instructor to be announced. Lec. Tu Th 11-12:15. Discussion: 1 hour to be arranged.

1, 2. History of Physics Laboratory. (Elementary.)

A selection of experiments illustrating discoveries, measurements and concepts which have played a major role in the development of physics. These experiments are performed and reviewed with regard to their actual historical context. **No credit.** Professor Dostrovsky. No lecture. Lab. M 2:10-4, in 515 Altschul.

V1003x, V1004y. General Physics.

The study of mechanics and heat, electricity, magnetism, optics, and modern physics. Calculus is not a prerequisite for this course. Instructor to be announced. Lec. and Recit. M W F 11. Lab. 3 consecutive hours to be chosen from M Tu W Th F 1:10-4 or 4:10-7. Recitation and laboratory sections are arranged after the first class meeting.*

V1103x, V1104y. General Physics.

The same topics as V1003-V1004 discussed at a somewhat higher level, using calculus. Prerequisite: Calculus I and II. Instructor to be announced. Lec. M W F 11. Three hours of laboratory and one recitation hour, to be arranged at the first meeting of the class. Lab. hours same as V1003-V1004. Laboratory is required of all students wishing to receive credit for this course.*

C1006x. General Physics I. Mechanics.

Fundamental laws of mechanics: kinematics; dynamics; work and energy; rotational dynamics and angular momentum; introduction to special relativity and relativistic kinematics. Parallel: Calculus I or the equivalent. Professors Becker and Gupta, and Dr. Groves. Lec. and Recit. Sections I and II. M W F 9. Section III. Tu Th 11-12:15. Lab. to be arranged.*

C1007y. General Physics II. Electricity and Magnetism.

Electrostatics; direct currents; electromagnetism; alternating currents; wave motion. Prerequisite: C1006. Parallel: Calculus II or the equivalent. Professors Becker and Gupta. Lec. and Recit. Section I. M W F 9. Section II. Tu Th 11-12:15. Lab. to be arranged.*

C1107y. General Physics II. Electricity and Magnetism.

The topics of C1007 are considered in greater depth, with less time spent on routine applications and with extended treatment of some of the more advanced topics. Prerequisite: same as for C1007y. Professor Guernsey. Lec. and Recit. M W F 9. Lab. to be arranged.*

^{*}No changes in laboratory assignments will be possible after the second class meeting.

C1011x. General Physics III. Optics and Thermodynamics.

Acoustical waves; nature of light; polarization; geometrical optics; interference and diffraction of light; heat; states of matter; gas laws; the laws of thermodynamics; kinetic theory of gases. Prerequisite: C1006. Parallel: Calculus III. Instructor to be announced. Lec. Tu Th 9. Recit. 1 hour to be arranged after the first meeting. Lab. to be arranged.*

C1012y. General Physics IV: Modern Physics.

Quantum effects; atomic structure and spectra; nuclear structure and reactions; fission and fusion; elementary particles. Prerequisite: C1011x and C1007 or C1107. Professor Price. Lec. Tu Th 9. Recit. 1 hour to be arranged after the first meeting. Lab. to be arranged.*

C1021x, C1022y. General Physics.

Mechanics, heat, electricity, magnetism, and light. Prerequisite: advanced placement in mathematics or some knowledge of differential and integral calculus, and permission of the departmental representative. (A special placement meeting is held during Freshman Orientation.) Intended primarily for freshmen with special ability in mathematics and physics. Professor Wolff. Lec. M W 4:10-5:25. Lab. to be arranged.*

V2005y. Contemporary Physics.

A discussion of topics in contemporary physics. Intended for students interested in science, but not specializing in physics. Prerequisite: C1001, C1002, or V1003, V1004, or V1103, V1104 or equivalent. Professor Devons. Lec. M W 4:10-5:25. No laboratory.

11, 12. History of Physics Laboratory.

Individual studies. Experimental investigations which played a major role in the logical and historical development of physics are studied by both laboratory and literary work. Students working individually or in collaboration with another student choose one or two examples (ranging from physics in the 17th to the 20th century) and study these thoroughly, with some guidance. Prerequisite: Good basic knowledge of physics and permission of the instructor; aptitude for laboratory work; individual initiative. Professor Devons. Hours by arrangement.

[32. The Physics of Musical Sound. Professor Dostrovsky. Not given in 1976-77.]

W3003x. Mechanics

Newtonian mechanics; conservative forces and potentials; oscillations; central forces. Prerequisite: general physics and integral calculus. Professor Baltay. M W F 10.

W3007x, W3008y. Theory of Electricity and Magnetism.

A discussion of electrostatics, current flow, electromagnetism. The treatment is directed toward the formulation of Maxwell's equations and includes some applications associated with lumped-impedance circuits, transmission lines and plane electromagnetic waves. Prerequisite: Physics C1007 or C1107 or the equivalent, and differential and integral calculus. Professor Novick. M W 11-12:15.

W3072y. Seminar in Current Research Problems.

A detailed study of a selected field of active research in physics. The motivation, techniques, and results obtained to the present, as well as the difficulties and unsolved problems. Permission of the department representative required. Open only to senior physics majors. Instructor to be announced. Th 4:10-5:25.

W3081x or y. Intermediate Laboratory Work.

Experiments in physical optics, electronic circuits, atomic physics, and nuclear physics.

^{*}No changes in laboratory assignments will be possible after the second class meeting.

An individual program of experiments is arranged for each student in accordance with her interests and previous experience. Immediately after registration and not later than the end of the second day after the beginning of classes, registrants should consult the staff member in charge about assignment to a laboratory section and the schedule of experiments to be performed. Prerequisite: Physics W3003 or W3007, or permission of the instructor. Professors Rainwater and Weisskopf. One four-hour period weekly. Hours to be arranged by the instructor.

W3083x or y. Electronics Laboratory.

A sequence of experiments in solid state electronics, with introductory lectures. Permission of the instructor required. Corequisite: W3003 or W3007. Registration is limited to the capacity of the laboratory. Professor Franzini. M W 1-4.

GRADUATE COURSES

The following G4000 courses form an integral part of the undergraduate major program in Physics:

G4001x. Some Topics in the History of Physics: 17th to 20th Centuries.

Prerequisite: C1006 and C1007 and C1011 and C1012, or permission of the instructor. Professor Devons. Hours to be arranged.

G4003y. Lagrangian Mechanics.

Generalized coordinates; Lagrange's and Hamilton's equations with applications including rigid bodies. Normal coordinate treatment of coupled systems. Prerequisites: integral calculus and differential equations and W3003 or equivalent. Professor Weinberg. M W F 10. Problem session (optional): hours to be arranged.

G4009x. Light.

Physical and geometrical optics. Prerequisite: general physics and integral calculus. Professor Hartmann. M W F 10.

G4013x. Thermodynamics.

General principles of thermodynamics; the three fundamental laws; definition of entropy and the thermodynamic potentials; simple application of thermodynamics; microscopic interpretation of thermodynamics. Prerequisite: W3003 and W3007. Parallel: G4015. Professor Guernsey. Tu Th 2:40-3:55.

G4015x, G4016y. Atomic Physics and Introductory Quantum Mechanics.

The experimental basis of modern atomic physics. The interpretation of atomic structures and radiation phenomena in terms of the quantum theory. Elementary wave mechanics is applied to simple atomic structures and to potential well and barrier problems. Atoms in applied fields and the interactions in many electron atoms are treated by perturbation theory. The theory of spin and angular momentum. Prerequisite: C1006, C1007, C1011, C1012, or their equivalents, and two additional terms of course work in intermediate or advanced physics. Professor Happer. M W F 9. Problem session (optional): hours to be arranged.

G4040y. Nuclear Physics.

Properties of nuclei, the two-body problem at low energies and nuclear forces, alpha radioactivity, beta decay, emission of electromagnetic radiation and selection rules, nuclear shell structure, phenomena associated with the passage of nuclear radiations through matter and methods of detection, high-energy accelerators, nuclear reactions, artificial radioactivity, neutrons, and nuclear fission. Prerequisite: G4015 or the equivalent. Professor Wu. Tu Th 11-12:15.

G4050y. Elementary Particle Physics.

A basic treatment of elementary particle physics with emphasis on the experimental point of view; classification and properties of the particles; strong interactions of strange and nonstrange particles, weak interactions; symmetry principles. Prerequisite: G4015x. Professor Baltay. M W 2:40-3:55.

Professors

Demetrios Caraley (Chairman; 408 Lehman Hall), Peter Juviler

Associate Professors

Dennis Dalton, ¹ Inez S. Reid

Assistant Professors

Richard M. Pious, Hannah J. Zawadzka

Lecturer

Annette B. Fox

Instructor

Flora S. Davidson, Phillip A. Singerman

Other officers of the University offering courses listed below:

Professors

Zbigniew Brzezinski, Douglas A. Chalmers, Robert W. Cox, Herbert A. Deane, Julian H. Franklin, Charles V. Hamilton, Roger Hilsman, Warner R. Schilling, Bruce L. R. Smith, Alan F. Westin

Associate Professors

Thomas P. Bernstein, Donald A. Puchala

Assistant Professors

Lynn E. Davis, Gerald Finch, Dall W. Forsythe, James H. Mittleman, Wilbur C. Rich, Richard L. Rubin

Instructor

Eileen Sullivan

Lecturer

Seweryn Bialer

The purpose of the study of political science is to develop understanding of the basic political institutions and processes in human society. This understanding involves analysis and evaluation of political systems in the context of the challenges they face and the changes they undergo. The major is designed to equip the student to play an effective role as citizen in a democratic political order, to participate more actively in political life as public or party official, civil servant, lawyer, or political commentator, or to undertake graduate training in political science in preparation for a career in college teaching.

A student majoring in political science is required to take a minimum of nine semester courses from the Department's listed offerings, including Courses 1; either 2, 11, 13, or 14; and two colloquia or other courses having a research paper from among those courses designated by an asterisk (*). A student majoring in urban studies with a concentration in political science is required to take a minimum of six semester courses including Courses 1, V3313, and two from among: 22, 26, 27, 28, V3306, V3407. In order to have the opportunity for independent specialized work, and to explore more adequately the techniques of scholarly investigation, both majors and concentrators are required to write a senior essay as part of the work for the required two-semester research seminar (either Course 61-62 or V3711x-V3712y).

The department's requirements are flexibly drawn so as to permit a major in consultation with her adviser to plan an overall program that, while providing some background in various areas of government and politics, can place special emphasis on

¹ Absent on leave, 1976-77.

Political Science

such particular interests as the American political system (including its urban subsystem), foreign political systems, international relations, or political theory.

Other social sciences: In view of the essential unity of the social sciences, students majoring in political science are urged to take at least three courses from among the following departments as selected in conference with the adviser: anthropology, economics, history, sociology.

GENERAL COURSES

Courses listed under this heading may be taken without previous study of political science.

1. Dynamics of American Politics.

An introduction to political dynamics through an examination of the American political system at the national level. Particular attention is given to how political officials are chosen and replaced, how governmental decisions are made, and how governmental performance affects demands on and support for the political system. Section I. Professor Pious. M W 11-12:15. Section II. Mr. Singerman. M W 2:10-3:25. Section III. Mrs. Davidson. Tu Th 1:10-2:25. Sign-up sheets for sections are posted outside 408 Lehman.

1y. Dynamics of American Politics.

Professor Pious, MW 11-12:15.

2. Comparative Politics.

Study of political attitudes, power, and problems of responding to challenge and change in selected political systems in Europe and Africa. Section I. Professor Zawadzka. M W 11-12:15. Section II. Professor Juviler. Tu Th 10:35-11:50.

3. Electoral Politics.

Intensive study of electoral politics, with particular emphasis on party and non-party campaign organizations, campaign strategies and tactics, and factors influencing the behavior of voters. Participation in or first-hand observation of an election campaign is a required part of the course. Mr. Singerman. M W F 10.

4. Freshman Seminar in Government.

Intensive study of a topic to be selected by the instructor. The aim of the course is to acquaint students with the methods and sources of political science and to provide experience in discussion and writing. Topic for Spring 1977, instructor, and hours to be announced in December.

7. Modern Political Movements.

An inquiry into the dynamics of political movements in this century, focusing on aspects of ideology and leadership. Case studies of communism, nationalism, anarchism, and fascism are examined in an international context after a theoretical discussion of the nature of movement politics. Professor Juviler, Tu Th 10:35-11:50.

V3313y. American Urban Politics.

Patterns of government and politics in America's large cities and suburbs. Analysis of the influence of party leaders, local officials, social and economic notables, racial, ethnic and other interest groups, the press, the general public, and the federal and state governments. The impact of urban governments on ghetto and other urban conditions. Professor Caraley (in charge) and Mrs. Davidson. Lec. M W 2:10 and periodic discussion sections to be arranged.

11. International Politics.

An exploration of the basic setting and dynamics of global politics, with emphasis on contemporary problems and processes. Open to freshmen with permission of the instructor. Professor Zawadzka, M W 2:40-3:55.

12. The United Nations in International Politics.

The position and role of the United Nations in the international political system, its fluctuating opportunities and limitations in the process of global conflict-management and conflict-resolution, and the evolving diversity of U.N. functions. Limited enrollment. Permission of the instructor required. Professor Zawadzka, M W 2:40-3:55.

13, 14. Political Theory.

Analysis of major political writings from Plato to the present. Emphasis is on a comparison of basic ideas and concepts. Course 13 is prerequisite to Course 14. Instructor to be announced. Tu Th 1:10-2:25.

SPECIALIZED COURSES

AMERICAN GOVERNMENT AND POLITICS

[15y. The Making of American Foreign and Military Policy. Not given in 1976-77.]

[V3306y. Political Economy of Cities. Not given in 1976-77.]

V3316x. The American Presidency.

Analysis of the growth of presidential power, the creation and use of the institutionalized presidency, presidential-congressional and presidential-bureaucratic relationships, and the presidency and the national security apparatus. Prerequisite: Course 1 or equivalent. Professor Pious. M W 2:40-3:55.

*22. The American Congress.

An inquiry into the dynamics, organization, and policy-making processes of the American Congress. Particular emphasis on the relationship of legislators with constituents, lobbyists, bureaucrats, the President, and with one another. Prerequisite: Course 1 or equivalent. Mrs. Davidson. Tu Th 2:40-3:55.

25. The Judicial Process.

Introduction to the American judicial system with emphasis on origins and strategies of litigation, factors which influence the hearing of cases by the Supreme Court, the controversies over judicial review and the commerce clause. Prerequisite: Course 1 or a course in American history. Not open to students who have taken course C3399x. Professor Reid. Tu Th 9:10-10:25.

26. Problems in Civil Rights and Liberties.

Analysis of the political and legal context for current issues in freedom of speech and religion, racial discrimination, the right to privacy, and criminal law enforcement. Prerequisite: Course 1. Professor Reid. Tu Th 9:10-10:25.

C3399x. The Supreme Court and American Constitutional Law.

The role of constitutional law and the judiciary in the American political system, with emphasis on the United States Supreme Court. Issues of civil liberties, political trials, federalism, and economic regulation are discussed. Students write a case study of a recent Supreme Court decision. Prerequisite: Course 1 and junior standing. Not open to students who have taken Course 25. Professor Westin. M W 11-12:15.

*C3400y. Colloquium on the Law and Politics of Civil Liberties.

After a survey of existing law on civil liberties and rights, issues of democratic theory, the role of groups in bringing test cases, the dynamics of civil liberties litigation will be discussed, using case studies involving political surveillance, racial equality, church-state issues, consumer rights, women's rights, and other issues. Prerequisite: Junior standing,

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at least one course in American government, and permission of the instructor. Professor Westin. M 11-12:50.

*27. Colloquium on the Content of American Politics.

Readings, discussions, and reports on changing cleavages and issues in American national politics. Prerequisite: Course 1 and permission of the instructor. Mrs. Davidson. W 2:10-4.

[28. Colloquium on Congressional Politics. Not given in 1976-77.]

W3311y. The American Party System.

Ways by which interests outside government achieve political influence at the national level; factors which promote stability and legitimacy in an age of rapidly growing demands. Primary emphasis on political parties, with attention to political participation, interest groups, and electoral behavior, and the impact of new radicalism on the American political system. Prerequisite: Course 1 and junior standing. Professor Finch. Tu Th 2:40-3:55.

W3315x. Urban Political Problems and Policies.

An analysis of urban political problems stressing urban stratification, power relationships, and substantive policy-making. Topics include the politics of health care, education, poverty and welfare, and the establishment of new mechanisms of urban participation. Prerequisite: V3313. Professor Forsythe. Tu Th 11-12:15.

35y. Colloquium-Workshop in Administration and Management.

Readings, discussions, and reports on the processes of administration and management. Particular attention is given to such topics as executive leadership and control, decision-making, organizational theory, budgeting, and planning. Prerequisite: Political Science 1 or V3313 or Urban Studies 46 or equivalent. Mr. Singerman. Th 2:10-4.

[V3407y. Urban Black and Minority Politics. Not given in 1976-77.]

FOREIGN GOVERNMENTS AND POLITICS

*20. Colloquium on Communism and Revolutionary Change.

Readings, discussions, and oral and written reports on the development of Communist and other revolutionary movements in the twentieth century; consideration of questions raised by theoretical and reflective works on the causes, nature, and consequences of recent revolutions and counterrevolutions. Prerequisite: Course 2 or 7 or 21 and permission of the instructor. Professor Juviler. Th 2:10-4.

*21. Colloquium on the Politics of Social Change in the U.S.S.R.

Discussion, analysis, and comparison of selected case studies of the Soviet regime's responses to issues of social change. Prerequisite: Course 2 or 7 or other formal study of Soviet government and permission of the instructor. Professor Juviler. Th 2:10-4.

[23. African Politics. Professor Reid. Not given in 1976-77.]

[24. Asian Politics. Professor Dalton. Not given in 1976-77.]

W3502y. Politics in the 20th Century: Modernization and Revolution.

A study of the transformations by which nations have entered or are entering the modern world with emphasis on non-Western areas. Critical analysis of the concepts of "modernization," "development," and "revolution." Prerequisite: Course 2. Professor Mittleman. M W 6:10-7:25.

W3512x. Democratic Politics in Western Europe.

A comparative analysis of politics in Great Britain, France, and Germany with emphasis on political culture, governmental institutions, parties, pressure groups, policy-making in modern industrial societies, and political changes. Prerequisite: Course 2. Professor Davis, M W 11-12:15.

W3522y. Communist Political Systems.

Concepts of comparative politics applied to the study of Communist societies (with stress on the USSR and China): theory and practice; political culture; political and economic institutions and modes of behavior; comparative stages of development and socio-political change. Prerequisite: Course 2 and junior standing. Dr. Bialer. Tu Th 2:40-3:55.

W3018y. Comparative Government and Politics: Authoritarian Systems.

The rise, structures, and collapses of authoritarian regimes in modernizing and industrialized countries, especially in Europe and Latin America. Fascism, emergency dictatorships, and military developmentalism. Interpretations and explanations from Marxist, developmentalist, and Liberal perspectives. Prerequisite: Course 2. Professor Chalmers. Tu Th 9:10-10:25.

W3620y. Chinese Politics.

The domestic and foreign policies of China and the relationship between them. Focus on contemporary Chinese politics, including elite conflict, the role of ideology, and the great social transformations, with background information on Chinese political culture and pre-revolutionary responses to the challenges of imperialism and modernization. Prerequisite: Course 2. Professor Bernstein. M W 4:10-5:25.

G4461x. Latin American Political Behavior.

Comparative analysis of major groups and processes in Latin American politics. Prerequisite: Course 2 and junior standing. Professor Chalmers. Tu 2:10-4.

G4487y. The Dynamics of Soviet Politics.

The role of Marxism-Leninism in Soviet politics; the role of the Communist Party in Soviet government and society; problems of industrialization, stages of development and political change; the balance of political forces and pressures in the Soviet state. Prerequisite: Course 2 or 7 and junior standing. Professor Brzezinski. Tu 9-10:50.

POLITICAL THEORY

*16. Colloquium on Personality and Politics.

Readings, discussion, and research on the role of personality in shaping political behavior, with special attention to the impact of personality in political leaders. Application form must be submitted to the instructor in advance for acceptance into the course. Mrs. Davidson. W 4:10-6.

*31y. Colloquium on American Political Thought.

Readings, discussion, and research on relationships among political attitudes of intellectuals, social scientists, bureaucrats, and politicians, on the role of political leadership in developing various thematic statements for mass perception, and on the role of bureaucratic intellectuals in developing images for elite audiences. Special attention is paid to political thought involving economic regulation and redistribution, civil rights and liberties, and American "destiny." Prerequisite: Course 1 and permission of the instructor. Professor Pious. Tu 2:10-4.

33y. Colloquium on Concepts of Political Theory.

Exploration of the relationship between political theory and political science by (1) investigating selected theoretical concepts and problems within the context of the writings of classical and modern theorists and (2) examining their pertinence, utility, and limitations for the understanding of contemporary domestic and international politics. Permission of the instructor required. Professor Zawadzka. Tu 2:10-4.

C3203x. Reflections on Politics in the Past Century.

A discussion of the political and social thought of a few of the important and influential thinkers of the last half of the 19th century. Focus on the thought of Karl Marx and Friedrich Nietzsche, but attention is also given to the writings of Engels, Bernstein, Sorel, and Lenin, Professor Sullivan. Tu Th 2:40-3:55.

C3204y. Reflections on Politics in the Twentieth Century.

Some major developments in political thought since World War I. Discussion topics include: the role of non-rational forces in politics, the nature of totalitarianism, elites and masses, violence, equality, and political justice. Ms. Welch. Tu Th 2:40-3:55

W3411x. Foundations of Western Political Thought: from the Greek Polis to the Formation of the Modern State.

Analysis and discussion of leading political theorists in their historical contexts. Among the authors considered are Plato, Aristotle, Polybius, Cicero, St. Augustine, St. Thomas, Machiavelli, Luther, Calvin, the Monarchomachs, and Bodin. Professor Franklin. Tu Th 11-12:15.

W3412y. Modern Political Thought: from the Seventeenth Century to the Present.

Analysis and discussion of leading political theorists in their historical contexts. Among the authors to be considered are Harrington, Hobbes, Locke, Hume, Montesquieu, Rousseau, J. S. Mill, Hegel, Marx. Professor Deane. Tu Th 11-12:15.

INTERNATIONAL RELATIONS AND FOREIGN POLICY

*18x. Colloquium on Problems in International Politics.

Readings, discussions, and reports on selected problems in international politics. Topic for 1976: The threat and use of force, its overt and covert character as well as its utility and limitations in contemporary conflict-moderation and management. Permission of the instructor required. Professor Zawadzka. Tu 2:10-4.

W3612y. International Politics, II: Advanced Topics in International Relations.

In-depth consideration of selected topics in international relations. The content of the course varies from year to year, but topics considered will generally include nationalism, imperialism, integration, arms racing, deterrence, and world systemic change. Prerequisite: Course 11. Professor Puchala. M W 2:40-3:55.

W3614y. Approaches to World Order.

Philosophical perspectives and the social, economic, and political conditions underlying different approaches to world order, with an accent on issues rather than institutions. Prerequisite: Course 11 or equivalent. Professor Cox. Tu Th 2:40-3:55.

C3655x. American Policies in World Politics.

An analysis of the major revolutions in American foreign policy; special attention to World Wars I and II, and the response to nuclear weapons. Prerequisite: junior standing. Professor Schilling. Tu Th 11-12:15.

C3656y. American Foreign Policy: Process and Problems.

The politics of policy-making; case studies on the making of policy and how this process affects the substance of policy; some current and prospective policy problems in Europe and Asia. Prerequisite: junior standing. Professor Hilsman. Lecture: M 4:10-6. Discussion groups: Tu 9-9:50 or 1:10-2.

COURSES FOR MAJORS AND CONCENTRATORS ONLY

Admission to particular sections of the senior seminar is limited. During Spring pre-registration students must obtain departmental approval for the section desired in the senior seminar.

[G4910x. Principles of Quantitative Political Research.

Professor Finch. Not given in 1976-77.]

[G4911y. Analysis of Political Data.

Professor Finch. Not given in 1976-77.]

V3711x-V3712y. Research Seminar in American Politics.

Discussions, conferences, and the writing of a senior essay on selected topics of American public policy and politics. Section I. Professor Caraley. W 4:10-6. Section II. Professor Pious. W 4:10-6. Section III. Autumn Term: Professor Rubin. Tu 2:10-4. Spring Term: Professor Hamilton. M 11-12:50. Section IV. Professor Rich. Th 4:10-6. Section V. Professor Smith. Tu 4:10-6. Section VI. Mrs. Davidson. Th 4:10-6. Note: Admission to Sections III, IV, and V also requires permission of the Barnard chairman.

61-62. Research Seminar.

Discussions and conferences on the researching and writing of the senior essay. Section II. Professor Reid. Tu 4:10-6. Section III. Professor Juviler. Th 4:10-6. Section IV. Professor Dalton. Tu 4:10-6. Section V. Professor Zawadzka and Dr. Fox. W 4:10-6. Section VI. Mr. Singerman. Tu 4:10-6.

GRADUATE COURSES

Certain graduate courses given in the University are open to qualified majors with the consent of the department and the major adviser. These courses are described in the Bulletin of the Graduate School of Arts and Sciences.



Psychology

Professors

Lila Ghent Braine (Chair; 415D Milbank Hall), Richard P. Youtz¹

Associate Professors

Barbara S. Schmitter, Mary Brown Parlee

Assistant Professors

Peter Balsam, George W. Kelling, Carol L. Raye, Susan R. Sacks, Frances F. Schachter, Sandra F. Stingle

Adjunct Assistant Professor

Donald E. Hutchings

Lecturer

Barbara R. Stewart

¹Emeritus

Psychology is concerned with the study of behavior and experience; different theoretical approaches are represented in the departmental offerings. Special facilities of the department include:

The Hollingworth Laboratories, which provide facilities for advanced students to pursue independent research projects under faculty supervision.

The Barnard Center for Toddler Development (Dr. Frances Schachter, Director, and Mrs. Patricia Shimm, Associate Director), which provides practicum and laboratory experience in conjunction with courses in child development.

Majors study the basic theories, methods and findings characteristic of the main areas in academic psychology. Requirements for the major are:

Psychology: Courses 1; 9; one, or both, of 5 and 30; one or more, of 21, 25, 38; and other courses selected in consultation with the major adviser to complete the required 8 courses in the department. At least three of the eight must be laboratory courses. Psychology 9 must be taken no later than the junior year. Of the two teaching apprentice seminars offered (49 and 50), only *one* may be credited towards the major, although course credit may be obtained for both.

Other fields: One course in philosophy, anthropology, or computer science; a one-year laboratory course in biology, physics, or chemistry.

The major examination consists of the Undergraduate Record Examination in psychology.

Laboratory Science Requirement: The college requirement in laboratory science may be satisfied by taking any two of the following courses: 5, 8, 12, 17, 27, 30, 48.

1x. Introduction to Psychology.

An introduction to the chief facts, principles, and problems of human behavior, through systematic study of a text, lectures, exercises, brief participation in a current investigation, and reading in special fields. Prerequisite for all other courses. Section I. Dr. Stewart. M W F 9. Section II. Professor Raye. M W F 10. Section III. Professor Raye. M W F 11. Section IV. Professor Parlee. Tu Th 9:10-10:25.

1y. Introduction to Psychology.

Section I. Same as Course 1x. Instructor to be announced. Tu Th 9:10-10:25. Section II. The course content is the same as that described for Course 1x, but the teaching method

is different. The course material is divided into units, each unit is studied, and then mastery of the unit is demonstrated in a reading evaluation. Reading evaluations are conducted by teaching apprentices supervised by the instructor. Professor Balsam. MW 1:10-2.

5. Psychology of Learning.

The basic methods, results and theory in the experimental analysis of behavior. Emphasis is placed upon operant and classical conditioning, and the application of these procedures to the analysis of behavior in a variety of species, including humans. The laboratory consists primarily of experiments using rats as subjects. Prerequisite: Course 1. Professor Balsam, Lec. Tu Th 11. Lab. (1 hour lecture, 2 hours projects) Tu or W or Th 1:10-4.

8. Perception.

An introduction to the problems, methods, and results of studies in perceptual behavior. The literature will be surveyed; key experiments will be discussed in detail. Problems of definition and experimental method will be emphasized. In the laboratory students will conduct a series of typical experiments and will prepare systematic reports of their results. Prerequisite: Course 1 or permission of the instructor. Not open to freshmen. Instructor to be announced. Lec. M W 10. Lab. (1 hour lecture, 2 hours projects) W or Th 2:10-5.

9x (or 9y). Statistics.

An introduction to statistics and its applications to psychological research. Basic theory, conceptual underpinnings, and the most common statistics will be covered. The laboratory will be devoted to discussion of weekly problem assignments. Prerequisite: Course 1 or permission of the instructor. Professor Kelling and assistant. Lec. MWF 11. Lab. Tu or W 1:10-3.

12. Psychological Measurement.

Introduction to test theory, including concepts of item construction, standardization, reliability, validity, and motivation. Emphasis is on design and research related to major categories of current tests. Laboratory projects will be concerned with constructing and evaluating test items under experimental conditions, with assessing various methods of test administration, and with the quantitative procedures necessary for such evaluations and assessments. Prerequisite: Course 1 and permission of the instructor. Professor Schmitter and assistant. Lec. M W 10. Lab. (1 hour lecture, 2 hours projects) W 1:10-4.

[16. Theories of Learning. Not given in 1976-77.]

17. Physiological Psychology.

An introduction to the study of the relationships between bodily processes and behavior. Topics covered include sensory and motor functions, motivation, emotion, and learning. Prerequisite: Course 1 or permission of the instructor. Instructor to be announced. Lec. MW 1:10-2. Lab. (1 hour lecture, 2 hours projects) Tu or W 2:10-5.

21x or 21y. Abnormal Psychology.

Theories and explanations of behavior termed neurotic and psychotic, with research bearing on their adequacy and validity; research on characteristics of persons who have been placed in the various diagnostic categories; theories of therapy, with research bearing on the outcome of therapy. Open to juniors and seniors who have had Course 1. Professors Schachter (Autumn) and Kelling (Spring). Tu Th 9:10-10:25.

25. Psychology of Personality.

A survey of the area; intensive readings of some major theorists; research utilizing personality variables. Special attention is given to the implicit and explicit personality theories of various types of people and to the articulation of the dialectic between explanations as a function of personality and explanations as a function of situational determinants. Prerequisite: Course 1 or permission of the instructor. Professor Kelling. MWF9. 169

Psychology

27x or 27y. Developmental Psychology.

An overview of cognitive, linguistic, perceptual, motor, social, and personality development from infancy to adolescence. The laboratory offers an opportunity for direct contact with children; major areas of research at each level of development are covered. Prerequisite: Course 1 or permission of the instructor. Professors Braine (Autumn) and Schachter (Spring). Lec. M W 1:10. Lab. M or Tu 2:10-5.

29x or 29y. Developmental Psychology (Demonstration).

The same as 27, but without laboratory and with a demonstration meeting. Lec. M W 1:10. Dem. Autumn Term: W 2:10-3; Spring Term: M 11:30-12:30.

30. Human Learning and Memory.

Survey of contemporary experimental approaches to the understanding of human learning and memory. Topics to be considered include: the theory of associations, theories of forgetting, transfer of learning, short-term memory, long-term memory, semantic memory. The laboratory will consist of experiments and demonstrations related to the above topics. Prerequisite: Course 1 or permission of the instructor. Professor Raye and assistant. Lec, M W 11, Lab, M or Tu 1:10-4.

34x. Educational Psychology.

Through a participative classroom model the major theories and issues in human psychological development and learning fundamental to the educative process are examined. The course studies the implications and applications of underlying psychological and educational assumptions. Prerequisite: Course 1 or permission of the instructor. Professor Sacks, Tu Th 10:35-11:50.

38. Social Psychology.

An introduction to the study of social behavior. Among the topics considered are social learning, interaction, group behavior, and verbal behavior. Experimental contributions to the understanding of social phenomena are emphasized. Prerequisite: Course 1 or permission of the instructor. Professor Parlee. Tu Th 9:10-10:25, and conference hour in connection with a project or paper.

40x. Cognitive Psychology.

Lectures and discussions will focus on selected topics illustrating the methods, findings, and theories of contemporary cognitive psychology. Consideration will also be given to historical antecedents of current questions and research techniques. Areas covered will include memory for both verbal and visual information, selective attention, the organization of semantic memory and comprehension. Prerequisite: Course 1 or permission of the instructor. Professor Raye, MW 1:10-2:25.

42. Child-Rearing: A Survey of Alternative Practices.

Past and current theories, methods, and implications of child-rearing practices examined through studies of parent-child relationships, family structures, sex-role differentiation, and school and community influence. Prerequisite: Course 1 or permission of the instructor. Limited to 30 students. Professor Sacks. Tu Th 10:35-11:50.

44x. Psychoanalysis from Freud to Laing.

Psychoanalysis from Freud and the Freudians (Erikson, A. Freud, Hartmann) to the early revisionists (Jung, Adler, and Reich), the neo-psychoanalysts (Fromm, Sullivan and Horney) and the existential analysts (Binswanger, Boss, May and Laing). Open to juniors and seniors who have had Course 1 or permission of the instructor. Professor Schachter. Tu Th 1:10-2:25.

45-46. Projects in Child Development.

The Barnard Center for Toddler Development provides the focus for this practicum and research seminar in developmental psychology. Students assist one morning a week at 170

the Center, carry out individual research projects, and participate in the ongoing research. There is a 2-hour weekly seminar. A few additional students will do only the research projects. Number of students limited. Prerequisite: Course 27 and permission of the instructor. Professor Schachter. Hours to be arranged.

48. Research Methods in Social Psychology.

Students will become familiar with a variety of research methods in social psychology by carrying out laboratory and field studies on selected topics. Class projects involve the use of self-report measures, observational measures, and experimental manipulation; an individual research project is required. Limited to 25 students. Prerequisite: social psychology, taken previously or concurrently. Professor Parlee. Tu Th 3:10-5.

49. Teaching Apprentice Seminar (Learning).

An intensive analysis of the principles of learning covered in Course 5. In addition to supplementary materials, students read the material assigned to Course 5 students, prepare Reading Evaluation Forms, and demonstrate in the seminar superior comprehension of the subject matter. Individual work with Course 5 students. Prerequisite: Course 5 and permission of the instructor. Professor Balsam. M 2:10-4.

50. Teaching Apprentice Seminar (Introductory).

An intensive analysis of the areas covered in Psychology 1. In addition to supplementary materials, students read the material assigned to Psychology 1 students, demonstrate superior comprehension of the material, and are instructed in the techniques of conducting reading evaluations. Individual work with Psychology 1 students. Open to Juniors and Seniors with permission of the instructor. Professor Balsam. M 2:10-4.

[52x. Human Learning and Memory. Not given in 1976-77.]

[57y. History and Systems of Psychology. Not given in 1976-77]

[68x. Case Histories in the Design of Experiments.

Professor Youtz. Not given in 1976-77. The course material may be studied as an individual project with Professor Youtz.]

SEMINARS

70x. Special Topics.

- [I. Psychological Analysis of Racism. Not given in 1976-77.]
- II. Psychological Services. Supervised field work applying psychological principles in clinical, educational, or other institutional settings. Seminar meetings involve presentation of case materials, and discussion of different theoretical approaches to clinical problems. Limited to 12 senior psychology majors (juniors accepted if space available). Permission of instructor required. Professor Stingle. Hours to be arranged.

71. Psychology and Women.

Selected topics relevant to the scientific understanding of women's behavior and experience: sex differences in personality and abilities; development of sex differences; biological, psychodynamic and social learning theories; psychological aspects of menstruation, childbirth, menopause; women and therapy; the sociology of psychology as it affects women. Limited to 20 students. Prerequisites: Psychology 1 and two other courses in psychology, or permission of the instructor. Professor Parlee. Tu 2:10-4.

[72. Topics in Developmental Psychology. Not given in 1976-77.]

99x, 99y. Individual Projects.

Research projects will be planned in consultation with members of the department. Open to majors on written permission of the member of the department who supervises the project. Members of the Department. Hours to be arranged.



Professors

Theodor H. Gaster, 1 Barry Ulanov (English)

Visiting Professor

Samuel Laeuchli

Associate Professors

Elaine H. Pagels, ² David Sperling (Acting Chairman, 219 Milbank Hall)

Assistant Professor

Joel Brereton

Visiting Assistant Professor

Arthur Green

Associate

D. Raoul Birnbaum

Instructor

Marilyn Harran

Other officers of the University offering courses listed below:

Professors

Joseph L. Blau, Gillian Lindt, J. A. Martin, Jr., Robert Somerville, David Weiss

Visiting Professor

Arthur Hyman

Assistant Professors

Carol P. Christ, Wayne L. Proudfoot, Frederic Underwood, Paul Valliere

¹Emeritus

²Absent on leave, 1976-77.

The purpose of the program is (a) to introduce the field of religion in general; (b) to present the thought, documents, and history of the major religious systems of the East and West; and (c) to give students an insight into the distinctive approach of each towards the analysis of the human condition and the solution of its problems. The courses are designed not only for those who may wish to specialize in religion, but also as a cross-fertilization of general studies in the humanities, e.g. in history, literature and philosophy.

The program of study for a major in religion is to be planned in consultation with members of the department by the end of the sophomore year. Ten semester courses are required, with the exact distribution to be determined by each student in consultation with departmental advisers. Majors will be encouraged to take one or two introductory courses, a variety of courses in Eastern and Western religions and in the theory and function of religion. All will be required to take two seminars and to write a senior essay in conjunction with one or both of these. Majors will also be expected to organize their programs to assure them of some direct experience and understanding of the disciplines involved in the study of religion, such as anthropology, sociology, psychology, literary analysis, philosophy, or history.

Students of religion usually fall into two groups, (1) those who pursue their study as a way of opening to themselves a large part of the liberal arts curriculum; touching many disciplines and methodologies of learning, and (2) those who have found special areas of interest and look forward to doing graduate work in religion. For both groups, a reading knowledge of such languages as Greek, Latin, Hebrew, Arabic, Chinese, or Sanskrit will be useful; for the second group, it is essential.

INTRODUCTORY COURSES

V1101x, V1102y or V1102x, V1101y. Introduction to the Study of Religion.

The phenomenology of religious experience and the historical terms of religious life. A study of the presuppositions, data, and documents of the religions of East and West. V1101: religions of the West. V1102: religions of the East. Religion V1102x-V1101y is primarily for students who wish to begin a sequence of courses in Eastern religion in their first term. V1101x-V1102y. Section I. Miss Harran (V1101) and Professor Brereton (V1102). M W F 10. Section II (Autumn Term only). Professor Valliere. Tu Th 10:35-11:50. V1102x-V1101y. Section III. Professor Underwood (V1102). Tu Th 6:10-7:25. Miss Harran (V1101). Tu Th 6:10-7:25.

V1001x or y. Major Topics in the Study of Religion

Introduction to the theory and practice of religion, East and West, e.g., myth and ritual, reason and revelation, law and community, mysticism and religious organization. V1001x. Section I. Professor Christ. M W 6:10-7:25. Section II. Professor Brereton. M W 11-12:15. V1001y. Section I. Professor Christ. M W 6:10-7:25. Section II. Professor Martin. Tu Th 10:35-11.50.

WESTERN RELIGIONS

Bible

V3201y. Introduction to the Old Testament.

An introduction by critical methods to the literature of ancient Israel against the background of the ancient Near East. Professor Sperling. Tu Th 10:35-11:50.

V3202x. Introduction to the New Testament.

An introduction, by critical methods, to the religious history of the Christian movement in the New Testament period. Professor Laeuchli. Tu Th 10:35-11:50.

Ancient Religions

G6312y. Ancient Near Eastern Religions.

A comprehensive study of the religious ideas, practices, institutions, and writings of the Egyptians, Mesopotamians, Hittites, Canaanites, and Israelites. The texts are read in translation. *Open to religion majors.* Professor Sperling. Th 4:10-6

[Class. Civ. V3160y. Roman Religion.

Not given in 1976-77.]

Judaism

[W4301x. Religion and Society in Ancient Israel and the Post-Exilic Community.

Professor Sperling. Not given in 1976-77.]

History W4508y. History of the Israelites to Alexander.

A critical survey of Israelite history based on the Old Testament, contemporary documents, and archeological evidence. Professor Smith. Tu Th 6:30-8.

W4302y. Religion and Society in the Period of the Mishnah and Talmud.

A critical survey of Jewish beliefs, practices, and institutions in late antiquity and the early medieval period. Primary sources read in original or in translation. Professor Sperling. Tu Th 9:10-10:25.

[W4303x. Judaism in the European Middle Ages and the Renaissance.

Professor Blau. Not given in 1976-77.]

W4304y. Judaism in the Modern Western World.

Judaism from the eighteenth century to the present in Europe, America, and Israel.

Responses to emancipation in Western Europe; Reform and Neo-Orthodoxy. Jewish enlightenment; secularism; Zionism; Jewish peoplehood and the Conservative movement in America; modern Orthodoxy; religion in Israel: an old faith in a new state. Professor Blau, M W 4:10-5:25.

Philosophy G4094x. Medieval Islamic and Jewish Philosophy.

A comparative and analytic study of major movements: Kalam, Neoplatonism, various forms of Aristotelianism, and critical reactions to philosophy. Philosophers studied are the Muslims: Alfarabi, Avicenna, Ghazali, Averroes; the Jews: Saadiah, Ibn Garirol, Halevi, Maimonides, Gersonides, and Crescas. Professor Hyman. M 12-1:50.

History W3575x-W3576y. Israelite and Christian Historiography.

Autumn: Historical writing and the notion of history in the Old Testament and apocrypha. Spring: Josephus and Christian historiography to Eusebius. Prerequisite: History W1005 and W1006 or their equivalents. Professor Smith. Tu 4:10-6.

Rabbinic Literature

V3320x. Introduction to Early Rabbinic Literature.

Investigation of major rabbinic writings (second to sixth century): emphasis on Agadah (nonlegal) sources. Professor Sperling. Tu Th 10:35-11:50.

[W4310y. Talmudic and Geonic Literature.

Professor Weiss. Not given in 1976-77.]

Judaism/Christianity. Comparative Study.

V3325y. Religious Controversies: Christianity and Judaism.

Comparison of Jewish and Christian teachings on disputed matters such as the law, the messiah, sin and atonement, holy men and interpretation of the Hebrew scriptures. Major focus on the period 100 B.C.-200 A.D. Some attention to contemporary viewpoints. Prerequisite: Introduction to Old Testament or New Testament or equivalent, Miss Harran and Professor Sperling. Tu Th 1:10-2:25.

History of Christianity.

V3402x. Early Christianity: From Paganism to Christianity.

Emergence of early Christian communities and thought; Jesus of Nazareth; Paul; the apostolic age; political clash with Rome; paganism and the mystery religions; dialectic of orthodox and heretical thought to Augustine. Professor Laeuchli. Tu Th 1:10-2:25.

[V3404y. Eastern Christianity.

Professor Valliere, Not given in 1976-77.]

[V3406x. Medieval Latin Christianity. Not given in 1976-77.]

V3407x. Mysticism.

Investigation of selected mystical writings, including Thomas Suso, Theresa of Avila, Francis of Assisi, Jacob Boehme, to consider how these interpret their own religious experience. Contemporary psychological, philosophical, and phenomenological views of mystical experience. May include consideration of figures in recent and Eastern traditions, Miss Harran, M W F 1:10.

V3500x. Studies in Religion and Culture: Sixteenth and Seventeenth Centuries.

See listing under Modern Religious Thought.

G6346y. Early Eastern Christianity.

Controversies in early Christian theology, especially between spokesmen for the orthodox majority (e.g., Justin, Irenaeus, Origen) and their Gnostic opponents (Marcion, Basilides, Valentinus). Crucial questions include the emergence of "orthodox" vs.

Religion

"heretical" Christianity. Apocryphal and patristic sources read in translation or in the original. *Open to undergraduate majors with the permission of the instructor.* Professor Pagels, W 4:10-6.

[V3408y. Catholic Theology since Vatican II. Not given in 1976-77.]

Modern Religious Thought

V3500x. Studies in Religion and Culture: Sixteenth and Seventeenth Centuries.

A study of the relation between religion and culture in Europe at the beginning of the modern period. Special attention will be given to the religious thought of the Northern Renaissance, the Reformation, the Counter-Reformation and to the changing views of man, God and the world in the 17th century. Readings from Erasmus, Luther, Calvin, Paracelsus, Loyola, Galileo, Descartes, Spinoza, and Payle. Miss Harran. M W 1:10-2:25.

V3501x. Studies in Religion and Culture: Eighteenth and Nineteenth Centuries.

The relation between religion and culture with special attention given to theories of religious development (personal, social, cultural). Readings from Hume, Edwards, Lessing, Rousseau, Kant, Hegel, Schleiermacher, Coleridge, Bushnell, Emerson, and others, Professor Proudfoot, Tu Th 2:40-3:55.

V3503y. The History of Religion in America.

Religious thought and institutions from colonial times to the present; influence on American political and social history through the work of representative individuals. Professor Blau, M W 11-12:15,

V3505x. Contemporary Religious Thinkers

Analysis of the views of selected contemporary thinkers in Jewish, Catholic, and Protestant traditions on problems of religious belief. Professor Christ. M W 11-12:15.

[V3507x. Contemporary Spirituality: American Indian Heritage. Not given in 1976-77.]

V3509y. Story and Religious Sensibility. (formerly V3381)

The religious imagination, vision, and sense of reality in the form and content of selected twentieth century novels. Professor Christ. Tu Th 2:40-3:55.

V3511y. The Grammar of Religion. (formerly G6111)

A systematic review of how common human concerns are treated in the leading religions of the East and West and in primitive cults: Gods and demons, holy and sacred, taboo revelation and prophecy, authority and scripture, ecstasy, kingship and priesthood, cult and worship, rite and prayer, sacrifice, life and death, seasonal ceremonies, magic and divination, myth, cosmogony, eschatology, heaven and hell, community and individual. Professor Gaster, Th 12:10-2.

EASTERN RELIGIONS

V3600x. History of Hinduism.

Origin and development of central themes of traditional Hinduism. Emphasis on basic religious literature and its relation to Indian culture. Readings include original sources in translation. Professor Brereton. Tu Th 10:35-11:50.

V3602y. Classical Texts in Eastern Religion.

Topic for 1976-1977: ancient Indian mysticism. Readings from such sources for Indian mysticism as the Rigveda, Brahmanas, and Upanishads. Professor Brereton. Tu Th 4:10-5:25.

V3607x. History of Indian Buddhism.

A chronological and phenomenological survey of the development of Buddhism in India from Gautama and original Buddhism to Hinayana sectarianism, Mahayana, and Vajrayana. Institutions, sects, cults, meditation and spirituality, philosophy. Professor Underwood. M W 2:40-3:55.

V3608y. Buddhism of Tibet, China and Japan.

An historical and phenomenological study of Buddhism in the Far East. Confrontation with indigenous traditions and cultural assimilation. Sects and schools. Institutions. Buddhism and the state. Philosophy. New forms of spirituality and redefinition of the "Holy Man." Professor Underwood, M W 2:40-3:55.

V3611x. Chinese Religious Thought.

A study of both native religions and philosophical movements and Buddhist developments in China. Professor Underwood. M W 11-12:15.

V3613x. Japanese Religious Thought.

Professor Underwood. Not given in 1976-77.]

V3615y. Art and Spiritual Discipline in Eastern Religions.

Creative effort as a means and expression of spiritual cultivation, formal iconography as a means of invocation: landscape painting, calligraphy, pottery and ritual vessels, sacred images, gardens, architecture, etc., considered in relation to religious texts and practices. Mr. Birnbaum. Tu Th 11-12:15.

W4607y. Contemporary Asian Spirituality.

An examination of modern trends in Asian religion, especially in India and Japan, and their impact upon the West. Topics will include the Neo-Vedanta movement and Hindu devotional sects in India, the "new religions" of Japan, and the resurgence and transformation of Buddhism in Asia. Professors Brereton and Underwood. Tu Th 10:35-11:50.

[W4608y. Comparative Yoga.

Professor Underwood. Not given in 1976-77.]

RELIGION, CULTURE, AND SOCIETY

V3700x. Women and Religion

Images and roles of women in Jewish and Christian traditions: modern forms of women's spiritual quest. Professor Christ. M W 11-12:15.

V3702y. Religious Ethics: War and Peace in Jewish and Christian Thought.

Jewish and Christian attitudes toward war and peace. A survey of the classical traditions (holy war, pacifism, just war) followed by attention to newer elements in the discussion: utopianism, revolutionary violence, and militant nonviolence. Professor Valliere. M W 2:40-3:55.

[V3708. Communes Past and Present: the Pursuit of Utopia. Not given in 1976-77.]

V3710x. The World of Folklore.

Comparative investigation of folklore and folkcustom, emphasis on European and American, with reference to Asian, African, and other sources, ancient and modern. Topics include: the life cycle (birth, betrothal, marriage, divorce, death); magic, healing, and superstition; folktale, drama, folksong, folklore today. Professor Gaster. Th 4:10-6 plus hour to be arranged.

[V3715. Religion in Contemporary Society. Not given in 1976-77.]

[V3717. Religion in Contemporary Culture. Not given in 1976-77.]

Religion-Sociology G4700x. Sociology of Religion.

Introduction to the nature and development of the sociology of religion in the nineteenth and twentieth centuries. Strategic developments in theory and methodology, with particular reference to the role of religion in culture, personality, and social structure. Professor Lindt. Tu 4:10-6.

W4705x. Social Theory and Religion: the Classics.

A critical survey and exposition of major sociological, psychological, and anthropological theories of man, religion, and society with particular reference to the nineteenth and early twentieth centuries. Professor Lindt. W 2:10-4.

Anthropology V3042y. Anthropology of Religion.

Ideological systems of simple or preindustrial cultures. Relations between religion and other aspects of culture, Professor Klass. Tu Th 2:40-3:55.

W4708y. Social Theory and Religion: Contemporary Studies.

A critical examination of selected contemporary sociological, psychological, and anthropological theories of man, religion, and society. Works considered will include those of Parsons, Bellah, Berger, Luckmann, Geertz, Swanson, Lévi-Strauss, Fromm, and Erikson. Professor Lindt, W 2:10-4.

SEMINARS

Students who are not religion majors must obtain permission of the instructor.

V3800x. Majors' Colloquium.

Consideration of topics such as theory of religion, history and significance of the academic study of religion, and problems of religious tradition in the modern world. Professor Valliere. Tu 4:10-6.

V3803x, V3804y. Seminars in Religious Thought.

V3803x. I. The Holocaust: Religious and Theological Reflection.

Consideration of the Holocaust in its historical and cultural context, with attention to religious and theological questions which it raises for Judaism and Christianity. Professor Christ. Th 4:10-6.

II. Icon and Symbol: the Interaction of Art and Religion.

The interactions, expressions, and contrasts between religion and art, studied in selected examples from ancient, medieval, and modern tradition. Professor Laeuchli. W 4:10-6.

III. The Way of Hasidism.

An examination of the spiritual and social forces that shaped the great mystical movement within classical Judaism on the brink of the modern era. Special attention to the nature of devotional mysticism as conceived by the Hasidic masters, and its place within the history of religion. Professor Green. M 4:10-6.

V3804y. I. Modern Christian Thought: Schliermacher and Barth.

Theological liberalism and neo-orthodox response, with particular attention to the nature of religion, religious and theological language, the doctrine of God. Professor Proudfoot. Tu 4:10-6.

II. Apocalyptic and Messianism.

Apocalyptic and messianic ideas and movements in Judaism from the Old Testament period through the seventeenth century. Professor Sperling. F 11-12:50.

III. The World of Myth.

The nature of myth; investigation of representative myths, both Eastern and Western. The science of mythology; myth today. Professor Gaster. Th 6:10-8.

Psychology-Religion V3900x. Seminar in the Psychology of Religion.

An exploration of the resources of contemporary psychology (cognitive, social, psychoanalytic) for the study of religion. Belief, conversion, emotion, ritual, meditation, will be among the topics studied. Professors Proudfoot and Shaver. M 4:10-6.

V3901x, V3902y. Guided Reading and Research.

A program of study designed to give outstanding majors an opportunity to pursue independently a subject of their choosing. A written essay is required of students taking this program. Consultation periods to be arranged with adviser. Members of the Department.

Professor

Richard F. Gustafson¹

Associate Professor

Marina Ledkovsky (Acting Chairman; 226E, Milbank Hall)

Associates

Anatol K. Sapronow, Marianna Sapronow, Zoya Trifunovich

Other officers of the University offering courses listed below:

Professors

Robert Belknap, William Harkins, Rufus Mathewson

Associate Professor

John Malmstad

Assistant Professor

Lynn Fisher

Associate

Irene Balaksha

¹Absent on leave, 1976-77.

The Russian Department offers courses in the language, literature, and culture of Russia. Besides a full four-year sequence in language work, there are specialized courses in major Russian authors and important periods in Russian literature and philosophy. Students should consult the department chairman in choosing language courses beyond the second year. For those who know no Russian, the department also gives a series of courses in Russian literature and culture taught in English.

The major in Russian at Barnard is a liberal arts program designed to help the student obtain reasonable fluency in the spoken and written language, a reading command of Russian adequate for interpreting texts, and a comprehensive knowledge of Russian literature and culture, especially of the nineteenth and twentieth centuries. Students will be encouraged to take one year of Russian history and to select relevant courses in philosophy, art, music, and other literatures. The requisites to the major, in most cases to be completed before the junior year, are Russian V1202y (or its equivalent) and usually two of the following: Russian V1220x, V1221y, V1222y. The minimum for the major is 8 courses. No courses with readings exclusively in English may be included in the minimal major program. Normally majors are required to take Russian V3333x, V3334y and two fourth-year language courses. The senior requirement may be fulfilled by taking one or two semesters of the Senior Seminar or by writing a Senior Essay. For further information, consult the departmental chairman.

Foreign Language Requirement for the Degree: All students must take a placement examination before entrance. This examination tests the student's knowledge of grammar, her comprehension of written and spoken Russian, and her ability in free composition. Students receiving a sufficiently high grade will automatically fulfill the requirement. All others must complete Russian V1202y or any course beyond that level.

LANGUAGE COURSES

V1101x-V1102y. Elementary Course.

Grammar, reading, composition. Oral practice in small groups. Section I. Professor Malmstad. M W F 10. Section II. Professor Ledkovsky. M W F 12. Section III. Mrs.

Balaksha, M W F 1:10, Oral Practice: Mr. and Mrs. Sapronow and staff, Section I. M W F 9. Section II. M W F 11, Section III. M W F 1:10, Section IV. M W F 2:10, Other hours to be arranged.

V1201x-V1202y. Intermediate Course.

Reading, composition, grammar review. Oral practice in small groups. Language laboratory work required. Prerequisite: Course V1102y or the equivalent. Section I. Mrs. Trifunovich. M W F 10. Section II. Mrs. Balaksha. M W F 12. Section III. Mrs. Trifunovich. M W F 1:10. Oral Practice: Mr. and Mrs. Sapronow and staff. Section I. M W 10. Section II. M W 11. Section III. Tu Th 9. Section IV. Tu Th 10. Section V. Tu Th 11. Other hours to be arranged.

V3331x, V3332y. Readings in Russian Literature.

Emphasis on conversation and composition. Reading and discussion of selected texts from nineteenth and twentieth-century Russian literature. Lectures, papers, and oral reports. Conducted entirely in Russian. Prerequisite: two years of Russian or permission of the instructor. Professor Fisher. M W F 1:10. Oral practice: Mr. and Mrs. Sapronow. Two hours to be arranged.

V3441x-V3442y, Oral and Written Russian: Advanced Course.

Selected twentieth-century Russian texts in philosophy, criticism, and literature provide a context for discussion. Lectures and reports on the modern period. Frequent compositions. Conducted entirely in Russian. Recommended for students who wish to improve their active command of Russian. The second term may be taken without the first. Prerequisite: three years of Russian or permission of the instructor. Mr. Sapronow. M W 3:10. Third hour to be arranged.

V3443x, V3444y. Advanced Russian: Syntax and Style.

Autumn Term: Systematic study of problems in Russian syntax; written exercises, translations into Russian, and compositions. Spring Term: Discussion of different styles and levels of language, including word usage and idiomatic expressions; written exercises, analysis of texts, and compositions. Conducted entirely in Russian. The second term may be taken without the first. Prerequisite: three years of Russian or permission of the instructor. Mrs. Trifunovich. M W F 2:10.

LITERATURE COURSES

V1220x. Nineteenth-Century Russian Prose.

The development of prose forms from Sentimentalism to Impressionism, with special attention to Gogol, Turgenev, and Chekhov. Tolstoy and Dostoevsky are not included. A knowledge of Russian is not required. Professor Malmstad. M W F 11.

V1221y. Twentieth-Century Russian Prose.

The course of Russian literature from Symbolism to the present, with emphasis on Bely, Bulgakov, Pasternak, Nabokov, and Solzhenitsyn. A knowledge of Russian is not required. Professor Harkins. M W F 11.

V1222y. Tolstoy and Dostoevsky.

Analysis of the major works of the two writers. A knowledge of Russian is not required. Professor Belknap. Tu Th 11-12:15.

[V1223x. Modern Slavic Drama in Translation. Not given in 1976-77.]

[V1224y. Introduction to Russian Culture.

Professor Harkins. Not given in 1976-77.]

[V1229x. Russian Drama and Theater. Not given in 1976-77.]

V3333x, V3334y. Introduction to Russian Literature.

Emphasis on reading and literary analysis. Close study of representative works of Russian literature from Pushkin to the modern period. Conducted mainly in Russian. Examinations in English. Prerequisite: a grade of B- or better in Course V1202y or permission of the instructor. Professor Ledkovsky. M W F 10. Oral practice (optional). Mr. and Mrs. Sapronow. Two hours to be arranged.

[V3461. Pushkin. Not given in 1976-77.]

[V3462y. Gogol.

Professor Maguire. Not given in 1976-77.]

V3463y, Tolstoy,

A close reading of *Anna Karenina*. Prerequisite: three years of Russian or permission of the instructor. Professor Mathewson. Tu Th 11-12:15.

[V3464y. Dostoevsky.

Professor Ledkovsky. Not given in 1976-77.]

V3465x. Russian Poetry in the Nineteenth and Twentieth Centuries.

Intensive reading of selected texts from representative lyric poets, including Tiutchev, Fet, Blok, and others. Attention to metrics, formal analysis of style and structure, and the relationships to literary and philosophical movements. Prerequisite: three years of Russian or permission of the instructor. Professor Malmstad. M W 12:45-2.

[V3467x. Twentieth-Century Prose Writers.

Professor Maguire. Not given in 1976-77..]

V3595x, V3596y. Seminar.

Supervised individual research, culminating in a critical paper. The second term may be taken without the first. Prerequisite: senior standing and permission of the instructor. The staff, First meeting (x and y) Th 3:10, both in 226E Milbank.



Sociology

Professor

Bernard Barber¹

Associate Professor

Jonathan R. Cole (Chairman; 410A Milbank Hall)

Assistant Professors

Guillermina Jasso, James C. Wendt

Lecturers

Nathalie Friedman, Theresa F. Rogers

¹Absent on leave 1976-77.

²Absent on leave, Spring Term.

Sociology introduces students to the scientific study of society. The basic problems common to all human societies and the varied institutional solutions to these problems make up one large area of sociological interest; hence the sociological study of the family, social class, economic and political institutions, religion, science, ideology, etc. The study of rural and urban communities, human relations in groups, social structure and personality are other areas of sociological interest. So also is the understanding of social change. Sociology is concerned not only with the normal functioning of social institutions but also with social problems such as racial and minority problems, industrial conflict, crime, and other areas of social disorganization. In studying these subjects, materials about American society are given primary emphasis. However, comparative materials from other societies, preliterate and more highly developed, are extensively used. Finally, sociology seeks to acquaint students with its methods of investigation, from which students can learn important facts about scientific method in general. A student majoring in sociology will be required to take: Course 1, 2 (preferably in the freshman year); V1205 and V1208 (both no later than fall of the junior year); 87-88 (in the senior year); and other courses selected in consultation with the major adviser.

There is no major examination. To graduate a student must complete, to the satisfaction of her instructor in Soc. 87-88 and one other member of the department, a long paper involving some form of sociological research and analysis.

1, 2. Introduction to Sociology.

An introduction to sociological analysis with comparative materials from contemporary American and other societies. Autumn Term: Alternative models of sociological analysis. Major structures of society: kinship, socialization, stratification, formal and informal organization. Spring Term: Major structures of society continued: polity, economy, religion. Selected problems of social deviance and social control. Race and ethnic relations. Problems of social change. These courses must be taken in sequence, but not necessarily in the same year. Section I. Professor Jasso. Tu Th 10:35-11:50. Section II. Professor Wendt, M W F 11.

22. Introduction to Social Work.

The growth of the profession. Intellectual influences which have shaped its development. The traditional fields of practice. The structure and function of voluntary agencies. Open to juniors and seniors. Prerequisite: two courses in social science other than history. Term paper required. Field work available. Instructor to be announced. M W F 10.

V1205y. Introduction to Social Theory.

An introduction to theories used in the study of complex societies and social change, including those of Marx, Durkheim, Weber, but stressing contemporary functional, conflict, interaction, and exchange theories. Professor Winckler. M W 4:10-5:25.

[V1206y. Equality and Inequality in Western Societies. Professor Cole. Not given in 1976-77.]

V1208x. The Logic of Social Inquiry.

Theories and their functions in inquiry; sociological concepts, their definition and measurement; criteria for evaluation claims to knowledge of social phenomena. The problem with common sense explanations. Concepts of causality in the social and physical sciences. The nature of evidence and inference. The conduct of inquiry; conceptualization and the formulation of hypotheses; observational procedures and problems of causal inference; analysis of quantitative and qualitative data. Professor Cole. Tu Th 10:35-11:50.

V3209y. Social Class and Social Mobility.

Consideration of the meaning of social class and social mobility in different cultural and institutional contexts. The impact of economic institutions on stratification and mobility. Historical forces which have shaped the present situation in Western Europe, America, and the socialist states. Class structure and mobility in future societies. Professor Goode, M W 11-12:15.

V3215x. American Society and Politics.

The relationship among American values, social structure, and political activity. Specific problems include poverty, racism, the social and political implications of a mature capitalist economy, the position of women, the absence of socialist beliefs in the working class, and alternative "integrative" and "conflict-oriented" strategies of social change. Professor Hammond. Tu Th 2:40-3:55

V3217y. Social Control.

An extensive survey of those facets of social organization which constrain human aspirations and behavior. The quality of human freedom. Special emphasis on (a) the changing character of social controls in a society of affluence and (b) the interaction between processes of social control and the expression of deviant behavior in various societies, Professor Martin, Tu Th 10:35-11:50.

V3225x. Sociology of Education.

The social organization of education in the United States, with emphasis upon primary and secondary schools. Topics include: the school as a complex organization; the classroom as a learning environment; social factors in academic aspirations and achievement; selected innovations in educational practices; and problems in the relations between the school and the community. Dr. Friedman. Tu Th 2:40-3:55.

V3228y. Sociology of Medicine.

An analysis of illness and its management in contemporary societies. Topics include: social definitions of health and illness, with emphasis on mental illness; the structure of the "sick" role; social factors in the etiology and distribution of illness; the social organization of the medical professions and of the hospital; and problems and prospects of health delivery systems. Dr. Rogers. M W 2:10-3:25.

V3265y. Minorities in American Life.

Comparative analysis of racial and ethnic communities in urban and rural areas of the United States, with emphasis on group identity and culture, and intergroup conflict and accommodation. Students will be required to prepare a research paper which applies theories and relevant empirical techniques to the study of a particular ethnic or racial community. Professor Kornblum. Tu 4-6:30.

V3324x. Urban Sociology.

Theories and empirical analyses of urban social structures and social processes in industrialized and agrarian regions. Students will be encouraged to apply course materials to studies of urban life and culture in New York City. Professor Kornblum. Tu 4-6:30.

V3326y, Personality and Social Structure.

Recent developments in theory and method. Social uses of concepts of motivation and

Sociology

personality and their consequences for social order, interaction, and institutions. Cross-cultural and historical studies, with emphasis on America. Professor Zablocki. Tu Th 2:40-3:55.

W3443y. The Sociology of Economic Life.

Advanced technology and modern industrial organization, as it affects social structure and quality of life on both wealthier and third world societies. Impact on other social features of business and trade; private ownership and public control; patterns of consumption and income; and the concentration and transmission of wealth. Materials drawn from sociological, economic, anthropological and historical sources. Some acquaintance with a social science is useful. Professor Beveridge. M W 2:40-3:55.

W3620y. The Sociology of Law and Legal Systems.

Law considered in the context of social norms and organization. Social factors in the emergence and change of legal rules and legal systems. Conditions affecting compliance and conformity. Modes of legal thinking, with special reference to the use of cases in Anglo-American law, Dr. Levin, MW 4:35-5:50.

V3555y. Sociology of Family Institutions.

Cross-national and historical perspectives on the nature of family systems. Family in relation to other institutions, in particular economic, political and class systems. The family and social change. Professor Litwak. W 2-4:30.

W3220x. Bureaucracy and its Alternatives: Improving Outcomes in an Organizational Society.

Brief overview of theories about how different kinds of organizations work; organization of careers, services, technologies, and politics in the fields of medicine, law, science, business, and government. Emphasis on learning to analyze alternative strategies for achieving personal objectives, making collective choices, and performing social functions through organizations. Professor Winckler. M W 2:40-3:55.

W3664x. Comparative Political Sociology.

Brief overview of the principal theories in comparative politics and the principal types of political systems in political evolution; focus on the organization of politics in contemporary societies, emphasizing the practical dynamics of gaining, maintaining, using, and abusing political power. Relationship of political systems to social environments, methodological problems of acquiring and applying sociological knowledge of politics, analysis of selected current political events. Professor Winckler. Tu Th 2:40-3:55.

W4008y. Revolution and Development in China.

Summary of sociological issues and overview of the evolution of Chinese society; recent Chinese political, economic, social and cultural development. Implications of the Chinese experience for theories of societal guidance, organizational learning and individual participation in the development process. Audiovisual materials, biography and fiction employed when possible. Professor Winckler. Th 2:10-4.

[W4010y. The Structure of Soviet Society.

Professor Fisher. Not given in 1976-77.]

87-88. Individual Projects for Seniors.

Groups of 5-10 seniors will be assigned to instructors who will supervise the writing of long papers involving some form of sociological research and analysis. Professor Wendt. W 4:10-6.

Professors

Mirella Servodidio (Chairman; 208 Milbank Hall), Margarita Ucelay

Assistant Professors

Marcelo Coddou, Marcia Welles

Associate

Luz Castaños

Instructors

Helene Farber de Aguilar, Vilma Bornemann, James Crapotta, Enrique Giordano

Other officers of the University offering courses listed below:

Professor

Karl-Ludwig Selig

Assistant Professor

B. Russell Thompson

A major in Spanish is designed to enable the student to acquire ease and fluency in the written and spoken language and to develop an understanding of the cultural and literary traditions of Spain and the Hispanic Republics.

A student majoring in Spanish will be required to take Courses 13, 15, 17, 18, 20, 23, 25, 26, 31, 32.

Other fields: The following courses are recommended:

Anthropology V3029; Classical Literature 32, V3123; Art History 75, 76, 79; French 21-22; German 55, 56; History W4779x-W4780y. Philosophy 1; Religion V1101x. A major in Spanish must broaden her study of Spanish culture by relating it to other cultures which have influenced it or been influenced by it.

The major examination consists of a three-hour written examination on Spanish literature; a three-hour written examination on Hispanic civilization and Spanish-American literature; and a half-hour oral examination on literature and culture. All examinations are conducted in Spanish.

Foreign Language Requirement for the Degree: Freshmen who have had prior training in Spanish and who wish to satisfy the foreign language requirement in Spanish will be placed in the appropriate language courses on the basis of their CEEB scores, or, if such are not available, on the basis of proficiency tests taken before registration. Students having a sufficiently high score will automatically fulfill the requirement. All others may do so by completing course 4 with the exception of students of Spanish-American background who must fulfill the requirement with Spanish 6x instead of Spanish 4. Transfer students should consult the department.

LANGUAGE COURSES

V1101x-V1102y. Elementary Full-Year Course.

Grammar, reading, conversation. May not be taken parallel to elementary Italian. Laboratory work. Members of the Department. Section Ia. M Tu W Th F 9. Section Ib. M Tu W Th F 9. Section IIa. M Tu W Th F 10. Section IIb. M Tu W Th F 10. Section IIc. M Tu W Th F 10. Section IIIa. M Tu W Th F 11. Section IIIb. M Tu W Th F 11. Section IVa. M Tu W Th F 12.

2x. Intensive Review of Elementary Spanish.

A course for incoming students whose score on the placement test puts them between

Spanish

the beginning and intermediate level. Also intended for students of Spanish-American background who have some speaking knowledge of Spanish but insufficient formal training or grammatical foundation. Laboratory work. Mrs. Aguilar. M Tu W Th 1:10.

3, 4. Intermediate Course.

A rapid review of grammar and syntax; oral practice. Discussion and analysis of important works in Spanish and Spanish-American literatures. Work in the language laboratory. Members of the Department. Section I. M W F 10. Section II. M W F 11. Section III. M W F 1:10.

3y. Intermediate Course, Part I. Equivalent to Course 3, but given in the Spring Term. Mr. Crapotta. M W F 10.

4x. Intermediate Course, Part II.

Equivalent to Course 4, but given in the Autumn Term. Professor Coddou. MW F 10,

6x. Problems of Spanish Grammar.

A study of morphology, structure, and syntax as a point of departure for questions related to New York City Spanish: i.e., why linguistic norms operate, what variants develop, to what extent New York City Spanish is peculiar and why. Recommended to students in Education, Linguistics, Urban Studies. Must be used to fulfill the foreign language requirement by students of Spanish-American background. Mr. Giordano. M W F 1:10.

9, 10. Advanced Oral Spanish.

A study of spoken Spanish, of differences of pronunciation in Spain and America. Conversation, oral drills, and field work. Not intended for students of Spanish-American background. Permission of the instructor required. Professor Welles and Mr. Giordano. M Tu W Th 1:00.

LITERATURE COURSES

For non-majors, the literature courses listed in this section will count toward the general requirement. All Barnard courses are conducted entirely in Spanish except Course 40 and 41.

5. Literary Analysis of Contemporary Authors.

Studies in depth of major 20th century works. Techniques of literary analysis as they apply to different genres. Theories of criticism. Critical evaluation of style, structure, and content. Prerequisite: Course 4 or 4x. Professor Servodidio M W F 11.

11. Significant Themes of Contemporary Latin-American and Spanish Literature.

Analysis and discussion of selected works of contemporary interest. Prerequisite: Satisfaction of the foreign language requirement in Spanish. Spanish 11 may be elected more than once for course credit providing sections vary.

The Cuban Revolution and its Reflections in the Short Story Genre.

Socio-political realities from 1959 to the present as they impact on literary expression. The relationship of art to ideology. Professor Coddou. M W F 11.

11y. The equivalent of Spanish 11, but given in the Spring.

I. The Victims: Poverty in Prose and Poetry.

The rural and the urban poor in modern Latin America as portrayed in contemporary literature. Political and psychological aspects of mass poverty. Writers to include Rulfo, Vargas Llosa, Arguedas, Fuentes, Chavez Alfaro, Mariategui. Readings in the social sciences and selected English authors (Oates, Malamud, Steinbeck) for comparative purposes. Mrs. Aguilar. Tu Th 1:10-2:25.

II. Don Juan: Man and Superman.

Genesis of the Don Juan legend and its development in Spanish Literature (Tirso de Molina, Espronceda, Zorrilla, etc.). Its repercussions in Western Literature, including works by Molière, Shadwell, DaPonte (Mozart), Byron, and Shaw. Philosophical and psychological interpretations of this literary figure. Miss Castaños. MW F 1:10.

13. The Culture of Spain.

The history and culture of Spain. A study of the origins and evolution of Spanish character, tradition, and thought. The interrelationship of its history and arts and the scope of its contribution to Western culture. Lectures and written reports. The use of audio-visual materials will be stressed. Prerequisite: Course 4 or 5. Professor Ucelay. M W F 11.

15, 16. Spanish-American Culture. (formerly 14)

An introduction to the history of Spanish-American culture from Pre-Columbian times to the present. The first semester deals with Spanish-American history, society, and art, from the time of the great Indian empires to the late nineteenth century. The second semester examines subsequent developments up to the present day, with stress on contemporary revolutionary movements, mentalities, and purposes. The course is concerned with patterns of cultural identity and nationality, and involves anthropological as well as historical data. Both terms required of Latin American Areas majors. The first semester required of Spanish majors. Prerequisite: Satisfaction of the language requirement in Spanish. Professor Coddou. M W 2:10-3:25.

C3333x-C3334y. Masterpieces of Spanish Literature (in Spanish)

A systematic survey of the major works of the great writers of Spain and Spanish America. Readings, discussions, and brief reports. Instructor to be announced. MWF 9.

17. Spanish Literature in the Middle Ages and the Early Renaissance.

Lectures and discussions in Spanish on Spanish Literature from its origins to the beginning of the sixteenth century. Prerequisite: satisfaction of the foreign language requirement in Spanish. Professor Servodidio. M W F 10.

18. Literature of the Golden Age.

A study of the poetry, theater, and narrative of the Golden Age. Lectures and discussion of principal authors including Garcilaso, the mystic poets, Cervantes, Lope de Vega, and Calderón. Prerequisite: satisfaction of the foreign language requirement in Spanish. Professor Welles. Tu Th 10:35-11:50.

20. Don Quijote.

Close analysis and discussion of Cervantes' masterpiece. A study of the principal critical works as outside reading. Prerequisite: Course 17 or 18 or written permission of the instructor. Professor Ucelay. M W F 11.

23y. Nineteenth Century Literature in Spain.

Romantic drama and poetry; the realistic novel with special emphasis on Galdós. Prerequisite: Course 17 or 18 or written permission of the instructor. Professor Ucelay. M W 1:10-2:25.

25. Contemporary Spanish Literature, Part I.

Characteristics, technique, and style of the writers of the generation of '98 from Unamuno to Ortega y Gasset. (Baroja, Valle-Inclan, Azorin, Benavente, A. Machado, Juan Ramon Jimenez will be specifically studied.) One term paper. Prerequisite: Course 17 or 18 or written permission of the instructor. Professor Ucelay. MW 1:10-2:25.

26. Contemporary Spanish Literature, Part II.

The ideas, trends, and new literary concepts from García Lorca and the generation of '27 to the present-day writers. One term paper. Prerequisite: Course 17 or 18 or 25 or written permission of the instructor. Professor Welles. Tu Th 1:10-2:25

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31, 32. The Literature of Latin-America.

Autumn Term: An introductory study from its indigenous origins in the Popol-Vuh, through the Colonial period to the twentieth century. Emphasis is placed on the Modernist poets and the literature of the Gaucho and the Indian. Mr. Giordano. Tu Th 1:10-2:25. Spring Term: Post-Modernist poetry; Jorge Luis Broges; the contemporary Latin-American novel. Professor Servodidio. M W F 10.

33. Senior Seminar.

Intended to supplement or coordinate the work done in other courses and to introduce the student to the methods of scholarly research. Open only to seniors. Professor Servodidio. Hours to be arranged.

34. Latin-American Seminar.

Designed for senior majors in Latin-American areas to examine significant aspects of Latin-American culture. At the beginning of the semester, four general themes will be established from which the student will choose one as a focus for her research. Professor Coddou. Tu 3:10-5.

SPANISH LITERATURE IN TRANSLATION

40. Contemporary Latin-American Narrative in Translation.

Readings and discussions of major works by Asturias, Borges, Fuentes, Cortazár, García, Márquez, Rulfo, and Vargas Llosa. Special emphasis on the social and structural problems involved. No knowledge of Spanish is required. Admission by written permission of the instructor. Professor Servodidio. M W 11-12:15.

41. The Spanish Inquisition: Dissent and Conformity.

Spanish Literature during the Inquisitional period as it reflects social and religious problems. The struggle of Old and New Christians. Freedom of expression and Inquisitional censorship. Readings to include *La Celestina*, the picaresque novel, the mystics, Cervantes and Calderón. Mr. Crapotta. Tu Th 1:10-2:25.

Comparative Literature-Spanish C3810x. Don Quixote in Translation.

A critical examination of Don Quixote with particular emphasis on narrative technique and the structure of the novel. There will also be a critical consideration of various kinds of novels (pastoral, sentimental, picaresque, and novels of chivalry) in their relationship to Don Quixote and the history and development of the genre. Professor Selig. Tu Th 11-12:15.

French-Spanish 90. Problems in the Teaching of French and Spanish.

A methods course designed to train future teachers in theories and techniques of language teaching. Emphasis on teaching of conversation, grammar, literature, translation and lesson organization. Students will actively practice and demonstrate techniques. Video-taping of some sessions for auto-criticism. Primarily for sophomores and juniors in the Education Program; others by permission. Mr. Crapotta and Mrs. Daly. Tu 12:10-1, Th 12:10-2. (Offered in alternate years.)

This program is supervised by the Committee on Urban Studies:

Professor of Political Science
Demetrios Caraley (Chairman; 408 Lehman Hall)

Professor of EnglishBarry Ulanov

Professor of GeographyLeonard Zobler

Professor of SociologyBernard Barber

Associate Professor of Anthropology
Paula G. Rubel

Associate Professor of Economics
Deborah D. Milenkovitch

Assistant Professor of History

John W. Chambers

Instructor in Urban Studies and Political Science
Phillip A. Singerman, Program Coordinator (401 Lehman Hall)

The purpose of urban studies is to develop understanding of the basic institutions, problems, and achievements of city life. A major in urban studies can be taken only in conjunction with a concentration in one of the regular departments. Normally the student should choose as major adviser the member of the committee from the department in which she intends to concentrate.

The major seeks, first, through departmental and interdepartmental courses, to expose the student to the concepts and findings of a broad variety of disciplines as they bear on urban subject-matter; and second, to encourage the student to acquire the techniques and habits of scholarly investigation through pursuit of more advanced and concentrated work in some particular urban-related discipline including the writing of a senior thesis.

The requirements for a major in Urban Studies are: (a) one course dealing primarily with urban subject-matter in each of three of the following departments from among those courses indicated: anthropology (V3100y, Urban Societies), economics (W3228x, The Urban Economy), history (W4673x or W4674y, American Urban History), political science (V3313y, American Urban Politics), sociology (V3265x, Minorities in American Life V3324x, Urban Sociology; or their equivalents); (b) one course dealing primarily with urban subject-matter from a list approved by the committee in each of two other departments, such as art history, English, geography, psychology, biology, architecture, and urban planning; (c) in the junior year Urban Studies 45-46, and in the senior year Urban Studies 64; (d) satisfactory completion of a concentration in one of the participating departments consisting on not fewer than five courses and the writing in that department of a senior thesis on an urban topic to be approved by the committee.

Note: A list of the specific courses that are approved for fulfilling requirement (b) and of the departments that offer concentrations for urban studies majors is available at the office of the Chairman.

Urban Studies

35y. Colloquium-Workshop in Administration and Management.

Readings, discussions, and reports on the processes of administration and management in organizations. Particular attention is given to such topics as executive leadership and control, decision-making, organizational theory, budgeting, and planning. Prerequisite: Political Science V3313 or Urban Studies 46 or equivalent and permission of the instructor. Mr. Singerman. Th 2:10-4.

45-46. Junior Colloquium in Urban Studies.

Autumn: An examination of urbanization using historical methods, concepts, and materials. Readings and discussions will focus on various types of cities in the past and on the origins of urban problems. Permission of the instructor required. Professor Chambers. Th 2:10-4. Spring: An examination of selected problems that currently afflict urban areas with particular attention to urban development, housing, education, poverty, and public finance. Assessment of attempted solutions including analysis of the theoretical assumptions implicit in such remedial efforts. Mr. Singerman. W 3:10-5.

W3880y. Seminar in Urban Studies: Theory and Practice of Urban Planning.

Professor Kolodny. Hours to be arranged.

64. Senior Colloquium in Urban Studies.

Readings and discussions on the state of the knowledge concerning "urbanism" with particular attention to emerging trends in and prospects of cities. Reports on research being conducted for the major thesis in the department of concentration. Mr. Singerman. Tu 2:10-4.



The following courses, drawn from the offerings of individual departments, are designed to provide Barnard students with knowledge of neglected material concerning the traditional status and changing role of women in culture and society, and more broadly, to stimulate a critical examination of the concept of gender in a variety of disciplines. These courses, while not constituting a program, serve as a complement to the kinds of specialization inherent in a major. Each course is described in detail in the appropriate department's announcements. For further information contact the co-chairpersons of the Women's Studies Coordinating Committee, Professors Braine (Psychology) and Sheffield (Greek and Latin), Milbank Hall.

ANTHROPOLOGY

V3021y. Sex Roles in Cross-Cultural Perspective. Professor Dwyer.

CLASSICAL CIVILIZATION

[V3158. Women in Antiquity. Professor Sheffield. Not given in 1976-77.]

ECONOMICS

10. Sex Discrimination and the Division of Labor. Professor Lloyd.

ENGLISH

40y. Section V. Sexuality in Literature. Professor Stimpson.

EXPERIMENTAL COLLEGE

3. Contemporary Feminist Thought. Professor Eisenstein.

ERENCH

43. French Women Writers. Professor Greene.

HISTORY

6. The History of Women in the Middle Ages. Professor Wemple.

24. Women in Revolutionary Paris, 1789-1795. Professor Levy.

81 History of Women in America to 1890. Professor Baxter.

[82. History of Women in America since 1890. Professor Baxter. Not given in 1976-77.]

W4095x. Women in Classical Antiquity. Professor Arthur.

W4350x, Women in Revolutionary and Soviet Russia. Professor Fitzpatrick.

STUDIES IN THE HUMANITIES

[6. The Homosexual in Literature. Professor Gustafson. Not given in 1976-77.]

INTERDEPARTMENTAL OFFERING

4. Determinants of Sexuality. Doctors Mogul and DeFries.

PLANNING

A4058, Women in Planning and Architecture. Professor Levitt.

PSYCHOLOGY

42. Child-Rearing: A Survey of Alternative Practices. Professor Sacks.

71. Seminar on Psychology and Women. Professor Parlee.

RELIGION

V3700x. Women and Religion. Professor Christ.

SOCIOLOGY

F3303x. Female and Male: A Sociological Perspective. Professor Komarovsky.

VIII. Professional Schools

Professional and graduate training is offered at various schools in Columbia University, and their Bulletins are available in the office of the Secretary of Columbia University. Information and advice concerning advanced work in the University may be obtained from advisers at Barnard.

The requirements for admission vary and must be checked by reference to current regulations and by inquiry to the Office of University Admissions or to the specific school. In some instances a student is eligible after two or three years of college study; in others a Bachelor's degree is essential.

SCHOOLS REQUIRING THE BACHELOR'S DEGREE

ARCHITECTURE

The Graduate School of Architecture and Planning offers courses of study leading to the Degree of Master of Architecture. Under normal conditions, the degree may be obtained in three years.

The requirement for admission to the School is an undergraduate degree in any field or the equivalent. In addition to the degree, three specific courses are required: one semester of physics; one semester of architectural history or art history; and one semester of painting, drawing or sculpture. One semester of calculus is recommended. The courses offered by the School are described in detail in the Bulletin of the School of Architecture. A copy may be obtained from the Office of Architecture Admissions, 400 Avery Hall, 280-3510.

BUSINESS

Programs leading to the MBA degree and the Ph.D. degree in business are available on a full-time, day study basis. In addition to the areas available at the Business School, special concentration areas can be arranged in conjunction with other graduate faculties. Combined degree programs at the master's level are offered with the Schools of Journalism, Law, Architecture, Medicine (Public Health), International Affairs, Social Work, and Engineering and Applied Science, and at the doctoral level with Teachers College.

Through the general approach of its core courses and study in one of the fields of business and management, students prepare for diversified managerial positions.

The Columbia Business School operates on a trimester program of instruction. A student may begin studies during the Summer, Autumn, or Spring Term and may complete the degree requirements in four consecutive terms, or may elect not to attend the school for any one four-month term for purposes of employment or vacation, and return to complete the four-term requirements.

Qualified seniors may inquire into cross registration. Business School courses completed in excess of the undergraduate degree requirements may be applied toward MBA credit to a maximum of five courses.

For further information, please write to the Graduate School of Business Admissions Office in Uris Hall.

!NTERNATIONAL AFFAIRS AND REGIONAL INSTITUTES

The School of International Affairs awards an M.I.A. degree on the completion of 48 points of graduate credit. The curriculum is intended to prepare students for careers in a variety of international fields. The program combines emphasis on international politics, international economics, regional specialization, and a functional specialization (such as international business, international law, foreign policy analysis and international communication).

Professional Schools

The Regional Institutes give certificates in conjunction with the degree program in the School of International Affairs or the Graduate School of Arts and Sciences. The Regional Institutes at Columbia are as follows: East Asian Institute, Near and Middle East Institute, the Institute on East Central Europe, Russian Institute, Institute on Western Europe, Institute on African Studies, the Institute of Latin American Studies, and the Southern Asia Institute.

Further information may be obtained from the Office of University Admissions, 106 Low Library.

JOURNALISM

The Graduate School of Journalism offers a one-year course leading to the degree of Master of Science. A Bachelor's degree is required for admission to this school. Undergraduate work should include a broad spectrum of courses ranging from literature and languages, to the social sciences and history.

LAW

The School of Law offers a three-year course of study leading to the degree of Doctor of Jurisprudence. There is no required prelaw curriculum.

Admission is on a competitive basis. All applicants are required to take the Law School Admission Test (LSAT) and register with the Law School Data Assembly Service (LSDAS). The test will be given in many locations throughout the United States several times during the academic year. For further information write to the Educational Testing Service, Princeton, New Jersey 08540.

MEDICINE

The College of Physicians and Surgeons offers a four-year course of study leading to the degree of Doctor of Medicine. The preparatory work at Barnard must include the requirements as follows: at least one academic year of English, physics, biological sciences, general chemistry, organic chemistry and a laboratory course in organic chemistry.

Before admission to the medical school, the entire premedical record of each applicant is carefully examined in order that those who are adjudged the most promising candidates for the profession may be selected. While the minimum requirement for admission is three full academic years of college work, the complete college course of four years is considered the most desirable preparation.

PUBLIC HEALTH

The School of Public Health offers graduate programs leading to the Master of Public Health degree and Master of Science degrees in Biostatistics and Epidemiology. Students in the Master of Public Health program may concentrate in one of the following areas: general public health; biostatistics; environmental management; epidemiology; health administration, including health planning, health facilities, and health program administration; mental health; population and family health; and tropical medicine. The Master of Public Health requires a minimum of three semesters of course work and at least one semester of supervised practical experience. The Master of Science degree may require two academic years of study. A Bachelor's Degree, some evidence of satisfactory preparation in quantitative subject areas, and an acceptable academic average are requirements for admission.

For further information write to the Office of Admissions, School of Public Health, 600 West 168th Street.

SCHOOL OF THE ARTS

The School of the Arts offers to graduates with a Bachelor's degree from Columbia University, or from another institution of acceptable standing, a two-year course of study leading to the degree of Master of Fine Arts in painting and sculpture, film, and writing, as well as the degree of Doctorate in Musical Arts in musical composition.

A bulletin describing these graduate courses, and also undergraduate courses, is available at the Dean's Office, School of the Arts, 617 Dodge.

SOCIAL WORK

The Columbia University School of Social Work offers a two-year course of study leading to the degree of Master of Science. An advanced curriculum leading to the degree of Doctor of Social Welfare is offered to graduates of schools of social work.

The School is an accredited member of the Council on Social Work Education. The curriculum includes a sequence of background and methods courses, supervised field work in social work agencies, and research to prepare students for professional practice in social work. A Bachelor's degree is required for admission. The undergraduate program of study must include sixty semester hours in liberal arts with a minimum of twenty hours in the biological and social sciences, with emphasis in the direction of the social sciences. A limited number of applicants may be considered for the M.S. program upon completion of three years of full-time undergraduate study. Applications should be filed in January of the junior year.

Admission is on a selective basis. The announcement, giving information about the curriculum and dates for filing applications, may be obtained from the Director of Admissions, 622 West 113th Street, New York, N.Y. 10025.

UNION THEOLOGICAL SEMINARY

Union Theological Seminary offers courses of study leading to the degree of Master of Divinity, Master of Arts in Education and Theological Studies, Master of Arts in Biblical Literature and Comparative Study of Religions. The Seminary also participates in joint programs leading to the degrees of Master of Arts and Doctor of Philosophy in the field of religion at Columbia University.

A Bachelor's degree is required for admission. Those applicants are selected who in the light of expressed purpose, personality, and record of scholarship give especial promise of usefulness in some form of Christian ministry.

Further information may be obtained from the Office of the Academic Dean, 3401 Broadway, New York, N.Y. 10027.

SCHOOLS NOT REQUIRING THE BACHELOR'S DEGREE

Admission may be gained to the following professional schools without a Bachelor's degree.

DENTAL HYGIENE

The Division of Dental Hygiene, School of Dental and Oral Surgery, offers a junior-senior course of study leading to a Bachelor of Science in Dental Hygiene. Applicants must have completed two years or sixty semester points of work in approved colleges or universities, including six points of English composition, four points of chemistry, four points in biology, three points in psychology, and three points in sociology. Graduates are qualified for licensing examinations in all states.

Further information may be obtained from the Dental Hygiene Admissions Office, Room 7-204, School of Dental and Oral Surgery, 630 West 168th Street.

DENTAL AND ORAL SURGERY

The School of Dental and Oral Surgery offers a four-year course of study leading to the degree of Doctor of Dental Surgery. Required preparation at Barnard College is a minimum of three years including one academic year or its equivalent of the following courses: English composition and literature, inorganic chemistry, organic chemistry, physics and biology.

The Admissions Committee of the School of Dental and Oral Surgery will consider carefully the entire predental record and select the most promising candidates.

ENGINEERING AND APPLIED SCIENCE

The School of Engineering and Applied Science offers undergraduate programs in the professional branches of engineering and in the applied sciences.

The first three years of the five-year program leading to the degrees of Bachelor of Arts and Bachelor of Science are spent under the jurisdiction of Barnard College, and a minimum of courses is taken in the engineering school. After successful completion of the first three years' work, the student applies for admission to the School of Engineering and Applied Science, where the remaining two years of more specialized engineering study are taken.

It is also possible to follow a four-year program which leads only to the Bachelor of Science degree. Two years of pre-engineering subjects are taken in Barnard College and the remaining two years of engineering study are completed in the School of Engineering and Applied Science.

Students interested in engineering or applied science should offer at entrance to Barnard mathematics through trigonometry, physics, and, if possible, chemistry, in addition to the general admission requirements. For details the Office of Admissions of the School of Engineering and Applied Science should be consulted.

Further information about the engineering program and the advanced degrees may be obtained from the Bulletin of the School.

NURSING

The School of Nursing offers a four-year program leading to a Bachelor of Science Degree in Nursing. The required liberal arts courses are taught by the faculties of Barnard College and the School of General Studies. Students begin their nursing courses in the freshman year. Clinical facilities are provided by several community agencies, St. Luke's Hospital Center, Roosevelt Hospital, and the Columbia-Presbyterian Medical Center. College graduates and junior transfers are admitted to this program for a two year course of study.

The School also offers graduate programs in Maternity Nursing-Nurse Midwifery, and Psychiatric-Community Mental Health Nursing leading to a Master of Science Degree following approximately a year of study.

Further information may be obtained by writing to the Office of Admission, School of Nursing, Columbia University, 179 Fort Washington Avenue, New York, New York 10032.

Professional Schools

OCCUPATIONAL THERAPY

The faculty of Medicine offers a graduate program leading to a Master of Science degree in occupational therapy which requires for admission an acceptable baccalaureate degree including stated prerequisites in English, biology, psychology, and sociology. The program of study includes sixty semester credits and eight months of clinical experience.

For additional information write to the Director, Programs in Occupational Therapy, College of Physicians and Surgeons, 630 West 168th Street.

PHYSICAL THERAPY

The Faculty of Medicine offers a program of professional study in physical therapy which leads to the Bachelor of Science degree. The candidate for admission must present two years of acceptable college work, including courses in biological sciences, physics, English, and psychology. Requirements for admission to the licensure examination for physical therapists in the State of New York include two courses each in biology, chemistry, and physics. Students who plan to practice in New York State should accordingly fulfill the remainder of these requirements.

The course of professional study covers 21 calendar months, including two academic years of didactic instruction and clinical practice, and a six-week clerkship following the junior year of study.

A graduate program of 13 calendar months is offered for students already possessing a Bachelor of Arts or Bachelor of Science degree, depending on previous preparation in biological science, physics, English, and social science. The Faculty of Medicine awards a certificate upon satisfactory completion of this course.



\$1.885.00

Barnard does not charge its students the full cost of their instruction, since its Trustees believe that admission to college should be based on intellectual ability and promise rather than financial resources. Student payments meet only two-thirds of the total educational expense; the balance must be obtained each year from investment income and from gifts of the Associate Alumnae and other friends of the College. By continuous efforts to increase annual gifts and endowment, and by economy of operation, the College keeps charges as low as possible without sacrificing the quality of its instruction.

SCHEDULE OF FEES AND CHARGES

Full program (3 to 5 courses)

The following fees are required from all students for each Autumn or Spring Term:

T			

Full program (5 to 5 courses)	\$1,000.00
Partial program (less than 3 courses). Charges will be assessed on a course or fraction of a course basis regardless of degree credit received. Per course	471.00
Excess program (6 or more courses). Charges will be assessed on a course or fraction of a course basis regardless of degree credit received. Per course	
Registration	10.00
Health Service (see page 200)	45.00
Insurance (see page 200)	25.00
Undergraduate Association Student Activity Fee	15.00
Intercollegiate Athletic Fee	3.00
The following fees are required from all students occupying College housing each Autumn or Spring Term:	facilities for
Reid, Brooks and Hewitt Halls	
Room - Single	445.00
Double	420.00
Board	345.00
600, 616 and 620 West 116th Street	
Room - Single Double	477.50 452.50
Plimpton Hall	
Room - Single	477.50
The following fees will be charged where applicable:	
Application for admission	20.00
Registration in absentia	15.00
Physical education — part-time students	5.00
Orientation fee (All students entering Barnard College for the first time)	
Autumn Term	35.00
Spring Term	7.00
Senior fee (All graduating seniors)	25.00
Deferred and special examinations (one taken at any other than at the conclusion of a course), payable when application is filed. For each such examinations	ation 10.00

Late Registration fee - \$5.00 for filing on the day after the deadline and \$2.00 additional for each additional school day that filing is delayed.

Late Program Filing fee - \$5.00 for filing on the day after the deadline and \$2.00 additional for each additional school day that filing is delayed.

Late filing of:

Application for deferred or special examination		5.00
Application for language placement test		5.00
Tentative program	,	10.00

Under certain circumstances, course or departmental charges may be made. Please see announcements of departmental offerings and special requirements for courses in the University.

DEPOSITS

All students: In order to obtain a place on the college roll for the ensuing academic year, students who are currently enrolled must pay a deposit of \$100 toward tuition and fee charges on or before May 16. Applicants for admission will be billed for the deposit at the time they signify their acceptance of admission to the College. One-half of this deposit (\$50) will be applied to the charges of the Autumn Term and the remainder to the charges of the Spring Term. The deposit toward the term's charges is forfeited unless the Bursar is notified of a change in plans no later than *July 1* for the Autumn Term or *December 1* for the Spring Term.

Resident students and nonresidents who pay housing fees through the College: a room deposit of \$200 is payable by *May 15* to secure the assignment of a room for the following academic year. One-half of this deposit (\$100) will be applied to the charges of the Autumn Term and the remainder to the charges of the Spring Term. The deposit toward the term's charges is forfeited unless the Bursar is notified of a change in plans no later than *July 1* for the Autumn Term or *December 1* for the Spring Term.

PAYMENT OF CHARGES AND FEES

All charges and fees are payable semiannually, in advance. No reduction is made for late registration. Registration is not complete until all charges and fees are paid. Failure to complete registration (including the payment of all charges and fees) on time imposes the late registration fee. See above.

Payment of residence charges (accompanied by a copy of the bill) must be made by *July* 15 for the Autumn Term and by *December* 15 for the Spring Term. Rooms will not be held for students whose residence bills are not paid by these dates.

Payment of tuition and fees (accompanied by a copy of the bill) must be made by August 10 for the Autumn Term and by December 15 for the Spring Term. Students admitted for the Autumn Term after August 1 must pay their bills by the first day of registration. A late payment fee of \$15 will be charged on all payments made or postmarked after midnight on the above dates.

All charges and fees are subject to change at any time at the discretion of the Trustees.

The privileges of the College, including examinations, are not available to any student who is delinquent in the payment of charges or fees. When bills are not paid by their due date or satisfactory arrangements for their payment are not made with the Bursar, the student will be required to withdraw from the College. Financial obligations include not only tuition, fees, and residence charges (if any), but fines due the libraries and other charges which may be incurred.

Checks or money orders in payment of all charges and fees must be in U. S. funds (at a U. S. bank) payable to Barnard College. Checks or money orders should be made out for the exact amount of the payment due.

(The application fee of \$20, payable when application for admission is filed, is not credited on the bill and is never refunded.)

NOTE: Holders of a New York State Regents Scholarship and/or Scholar Incentive Award may deduct the amount received in 1975-76 or the amount estimated by the Financial Aid Office provided they submit a copy of the certified or registered mail receipt indicating they have filed an application for 1976-77.

DEFERRED PAYMENT

Many parents prefer to meet academic expenses out of monthly income, rather than in large cash payments. Barnard College has no established plan for installment payments. The cost of operating such a plan and the fact that the College operates with a limited administrative staff preclude the possibility of such an arrangement. The College has arranged to participate in the Insured Tuition Payment Plan of Boston and the Tuition Plan, Concord, New Hampshire, which offer convenient payment programs for parents who desire to budget the annual cost in monthly installments. These plans may include insurance protection which covers the balance of the cost of the entire educational program in the event of death or disability of the insured parent. Brochures describing these plans will be sent to all parents of incoming students.

The College will also accept payment made through any bank or trust company or recognized financing agency provided payments are made on or before *August 10* for the Autumn Term or *December 15* for the Spring Term.

ADJUSTMENT OF FEES AND REFUNDS

For changing program of study: If a student changes her program and the tuition called for is lower than the amount she has already paid, she will be refunded the excess only if the alteration in her program was made by **September 24** in the Autumn Term and by **February 4** in the Spring Term. If the new program calls for higher tuition, the student must pay the difference at the time she registers the program change.

For withdrawal: If a student withdraws from College after *July 1* for the Autumn Term and *December 1* for the Spring Term, the following amount of tuition and residence fees paid will not be refunded:

Tuition and fees	\$ 50.00
Residence fees: Autumn Term	100.00
Spring Term	100.00

Up to and including the first Friday of the term (see the College Calendar), the remaining tuition and fees which the student has paid will be refunded in full. After the first Friday of the term, ten percent of the remaining tuition and fees will be retained by the College for each additional week, or part of a week, of the semester up to the date on which the student's written notice of withdrawal from the College is received by the Office of the Dean of Studies.

Up to and including the first Friday of the term (see the College Calendar), the remaining residence fees that the student has paid will be refunded in full. After the first Friday of the term, ten percent of the remaining residence fees will be retained by the College for each week, or part of a week, up to the date on which the student's written notice of withdrawal from the College is received by the Office of the Dean of Studies.

Fees

The refund will be based on the same schedule as refunds to students who withdraw from the College and will not be payable until and unless the room is rented for the remainder of the semester. Requests for exceptions to this policy should be addressed to the Director of Housing.

If a student has made only partial payment on her tuition or room and board, the amount of unpaid balance for each will be deducted from any withdrawal adjustment that is allowed. If the unpaid balance is larger than the credit allowed, the student must pay the difference.

Refunds: No refunds for board will be made for students who wish to take meals off-campus. Barnard is nondenominational and no provision can be made for special diets.

OTHER EXPENSES

The following information may be helpful in budgeting expenses not payable to the College: a minimum of \$150 per year for textbooks; \$300 to cover weekend meals when the dining hall in Brooks-Hewitt-Reid is closed; for students in "600," "616," "620," and Plimpton approximately \$650 for food; for commuting and nonresident students approximately \$200 for lunches at the College; approximately \$400 for clothing, laundry, recreation and miscellaneous expenses. Individual estimates of expense should also include allowances for transportation for nonresident and commuter students, or two round-trip fares from home to college for resident students.

STUDENT HEALTH SERVICE AND INSURANCE

Campus medical service is available to all Barnard students and is covered by the Health Service fee payable each term. This service is not available during college vacations.

Students are entitled to the following services:

- 1) an unlimited number of visits to the staff physicians
- 2) an unlimited number of visits to the gynecologists and dermatologist
- 3) use of the Counseling Service

The following services are available at an additional charge; these services are covered by the Barnard Insurance Plan:

- 1) hospitalization
- 2) medications
- 3) laboratory tests and x-rays
- 4) referrals for dental care and eye examinations
- 5) consultations

The following services are not provided:

- 1) home visits
- 2) consultations when the College is not in session
- 3) dental care

Enrollment in the Barnard insurance program is compulsory. For further details consult the Barnard Insurance Brochure.

SAFEKEEPING OF STUDENTS' FUNDS

Barnard College is not prepared to receive funds from students for safekeeping nor to cash personal checks or travelers checks.

To cover their immediate expenses, students should provide themselves with travelers checks, which can be cashed at a local bank, or money orders, which the Columbia University Station of the U. S. Post Office will cash upon presentation of a validated ID card. A validated ID card is issued after a student registers at the beginning of each term.

It is also possible to open a checking, special checking, or savings account at one of the local banks:

Chemical Bank

Broadway and 113th Street, New York, N. Y. 10025

Citibank

Broadway and 111th Street, New York, N. Y. 10025

American Savings Bank

Broadway and 111th Street, New York, N. Y. 10025



Insofar as possible, Barnard helps qualified students who have financial need. Barnard does not discriminate against applicants for financial aid on the basis of race, color, or national/ethnic origin.

Financial aid from the College consists primarily of grants and loans, although opportunities for part-time employment are also provided (See Office of Placement and Career Planning, page 38). In addition to providing financial aid from its own funds, i.e. gifts, endowment and general income, Barnard participates in the following Federal programs: the Basic Educational Opportunity Grant program, the Supplemental Educational Opportunity Grant program, the National Direct Student Loan program, and the College Work-Study program. Federal funds are administered by the College in accordance with government regulations and the College's general policies relating to financial aid. To supplement the above mentioned financial aid sources students are urged to investigate state loan and scholarship/tuition assistance programs and college tuition financing plans offered by local banks and insurance companies.

ANNUAL AWARDS

Loans or combination grant-and-loan awards are made by the Committee on Financial Aid to full-time students who have financial need and have demonstrated academic competence. The College shall be the sole judge of the financial aid to be granted, and may at any time withdraw or discontinue such aid. The amount of the award depends on the student's financial need and is determined from the following:

- 1. The amount of the parents' contribution as estimated from information given on the Parents' Confidential Statement of the College Scholarship Service.
- 2. The amount available from other sources, such as state scholarship/tuition assistance awards and other public or private scholarships.
- 3. The student's pre-college savings.
- 4. The student's summer earnings and/or earnings from part-time work during the academic year.

The basic budget used to compute financial need includes, in addition to the college fees, allowances for other expenses as described on page 200.

Awards are for one year only. Students in good standing are eligible to apply for assistance in subsequent years.

APPLICATION PROCEDURES

Entering Freshmen: A Barnard College application for financial aid may be obtained from the Admissions Office. It should be completed and returned to the Office of Admissions on or before January 15.

Each financial aid applicant must also file a Parents' Confidential Statement (PCS) with the College Scholarship Service not later than January 15 of her senior year in high school. The PCS should be obtained from the high school counselor. The College Scholarship Service acts as a central filing and distributing agent. Photostatic copies of the completed statements will be sent to the colleges named by the applicant. The College may require that, prior to disbursement of financial aid funds, an exact copy of the parents' Federal income tax return be submitted in order to verify information on the Parents' Confidential Statement.

Students applying for admission under the Early Decision Plan who wish to apply for financial aid must complete and file the necessary forms by November 1.

Each applicant must complete and file both forms as instructed above in order to be considered for financial aid. Each *bona fide* applicant is eligible for consideration for all

categories of aid administered by the College. Applicants are notified of awards at the time they receive their notice of admission to the College.

If an entering freshman applies to more than one college in the Six College Conference (Barnard, Bryn Mawr, Mount Holyoke, Radcliffe, Smith, and Wellesley), her application is reviewed in such a way that awards may be made on a noncompetitive basis. Awards vary only according to the institutional differences in fees and, whenever possible, are equivalent in value.

Transfer Students: Barnard College grants may be awarded to a limited number of transfer students who demonstrate financial need. All transfer students who apply for financial assistance should also apply for grants through the Federal Basic Educational Opportunity (BEOG) program, state scholarship/tuition assistance programs, and other outside scholarships. Transfer students may also be considered for a low-interest loan or part-time employment through the College.

Application procedures are the same as for entering Freshmen, except that forms must be submitted on or before December 1 for students expecting to enter in January, and June 1 for students expecting to enter in September.

Students Enrolled at Barnard: Any full-time Barnard student may apply for financial aid for the following academic year. *Students already receiving financial aid from Barnard must apply each year for a renewal award.*

Each applicant must file a Barnard College application for financial aid and a Parents Confidential Statement. These forms are available in the Office of Financial Aid beginning on December 1. In addition, the College may require that an exact copy of the parents' Federal income tax return be submitted in order to verify information on the Parents' Confidential Statement.

Applications must be filed on or before March 1.

Applicants will be notified of their awards by July 1.

NEW YORK STATE TUITION ASSISTANCE PROGRAM (TAP) AWARDS

A student who has been a legal resident of New York State for the preceding year may be entitled to a TAP Award (\$50 to \$750 per term) for up to four years while she is registered as a full-time degree candidate. The amount of this award is based upon the net taxable balance of her income and the income of those responsible for her support, as reported on the New York State Income Tax Return for the previous year. Application for awards must be made annually and should be filed by July 1 for each academic year.

Set forth below is a schedule of TAP awards on the basis of net taxable income. The net taxable income shown on the table is gross income less exemptions and deductions (Line 4 of the New York State Tax "Short Form," or Line 9 of the New York State Tax "Long Form"). A family's net taxable income, for the purpose of determining a TAP award, can be reduced \$3,000 for a second family member in full-time attendance at college, and by \$2,000 for each additional family member in college. TAP awards for Juniors and Seniors are \$200 less than the amounts shown on the schedule.

NET TAXABLE INCOME	ASSISTANCE AVAILABLE	NET TAXABLE INCOME	ASSISTANCE AVAILABLE
\$0- 2,000	\$1,500	\$12,000	\$770
3,000	1,440	13,000	670
4,000	1,380	14,000	570
5,000	1,320	15,000	450
6,000	1,250	16,000	330
7,000	1,180	17,000	210
8,000	1,110	18,000	100
9,000	1,030	19,000	100
10,000	950	20,000	100
11,000	870	over \$20,000	0

Further information and application forms may be obtained from the New York Higher Education Services Corporation, Empire State Plaza, Tower Building, Albany, New York 12223.

NEW YORK REGENTS COLLEGE SCHOLARSHIPS

Each year the Regents of the University of the State of New York award scholarships to full-time degree candidates who are legal residents of New York State. These awards are based on the Regents Scholarship Examination and are open to students in any approved college or university in the state. Awards are set at \$250 per year. High school students can get further information from their counselors. New York Regents Scholarships are not automatically renewed; they must be reapplied for annually.

BASIC EDUCATIONAL OPPORTUNITY GRANT (BEOG)

This Federal program provides grants to eligible undergraduate students.

In order to apply, a student must complete an *Application for Determination of Basic Grant Eligibility*, which may be obtained at high schools, colleges, and public libraries, or by writing to P.O. Box 84, Washington, D.C. 20044. The completed application must be sent to the BEOG Processing Center in accordance with instructions. Within four weeks a student will receive a *Student Eligibility Report*, which must be forwarded to the Office of Financial Aid so that the amount of the Basic Grant may be calculated. The maximum award can be as high as \$1,400, depending upon Federal appropriations for the program.

LOAN FUNDS

There are various loan funds at Barnard available for assignment to students as a part of their financial aid.

Barnard College Loans

The Associate Alumnae of Barnard College maintain a Student Loan Fund from which loans to seniors are made. In 1950, through a gift of \$26,000 from Mr. and Mrs. Gerard Swope and Miss Henrietta Swope, an additional fund known as the Swope Loan Fund was established. In the spring of 1960, the Barnard College Loan Fund was established by the Board of Trustees to help meet the increased need of students. In 1961, the Pauline Hirschfeld Loan Fund was established with a bequest of \$5,000 from Pauline Steinberg Hirschfeld, '08. In 1966 two new loan funds were established: the Barnard

College Club of Cleveland Loan Fund with gifts of \$1,276, to be used with preference for a student from the Northeastern Ohio area; and the Ann Susan Becker Memorial Loan Fund with gifts of \$1,530 from her family. In 1968 the Adelaide Le Clercq Loan Fund was established with a gift of \$3,000 from Adelaide M. Hart, '06, to be used with preference for a student majoring in music or French. In 1971 the Gertrude C. Hitchcock Loan Fund was established with \$100,000 at the bequest of Gertrude C. Hitchcock. In 1972 the Mildred Goetz Loan Fund was established with a \$50,000 bequest of Norman S. Goetz.

These funds are administered by the Committee on Financial Aid. Loans are regularly assigned as part of a student's financial aid award. No interest is charged while the student is in college. Payments on principal may be made at any time before graduation. Principal of indebtedness is repaid in semiannual installments of \$150 each after the student ceases to be in full-time attendance at Barnard College. Interest is charged from the first day of the month after the student ceases to be in full-time attendance at Barnard College at the rate of three per cent per annum on the unpaid balance.

The Morris Morgenstern Student Loan Fund of \$5,000 was established in 1959. Interest-free loans not to exceed \$500 are granted upon application to the Office of Financial Aid to any deserving undergraduates, other than freshmen, who are in need of temporary emergency assistance. Loans are granted for short terms, no longer than a year from the date of issue.

The Tudor Foundation Student Loan Fund of \$25,000 was established in 1967. Interest-free loans not to exceed \$1,000 in any one academic year are granted upon application to the Office of Financial Aid, to mature when the student terminates her connection with the College.

National Direct Student Loan Program

Barnard participates in the National Direct Student Loan Program (Title II of the National Defense Education Act of 1958). A portion of the funds for this Program are granted to the College by the federal government after application by the College; the balance of the funds are contributed by Barnard. These loans are assigned by the College to students as a part of their financial aid.

State Loans

Legal residents of the State of New York who are degree candidates are eligible to apply for loans guaranteed by the New York Higher Education Services Corporation. Interest on these loans is not charged while students are enrolled if the college certifies that the loans are needed to meet educational expenses. Interest and repayment of principal begins nine months after students cease to be registered at least half-time. Further information and application forms for these loans should be obtained from local banks.

Other states also have loan plans through the Federally Guaranteed Loan Program. Students should inquire at their local banks regarding such loan plans.

BARNARD COLLEGE FUNDS

The funds listed on the following pages were established by gifts, endowment, or in trust. The income from these funds is awarded by the College, on the basis of financial need, to students who apply for assistance through the regular financial aid program.

Scholarship Funds

UNRESTRICTED1

Niels J. Allison Fund (1964).

From the estate of Beatrice C. Allison '12. \$55,229.

Alumnae Scholarship Fund (1922).

A tenth reunion gift by the Class of 1912, subsequently supplemented by legacy from the estate of Julia Ludlow Young and by gifts of other alumnae. \$24,242.

Anna E. Barnard Scholarship Fund (1899).

In honor of Mrs. John G. Barnard by Emily H. Bourne. \$3,000.

Frances E. Belcher Scholarship Fund (1963).

By bequest of Miss Frances E. Belcher. \$42,257.

Ruth Marshall Billikopf Scholarship Fund (1950).

In honor of Ruth Marshall Billikopf '19, \$5,000.

Varian White Blumberg Scholarship Fund (1952).

From the estate of Varian White Blumberg '13. \$5,000.

Charles E. Bogert Memorial Scholarship and Anna Shippen Young Bogert Memorial Scholarship Fund (1913).

By bequest of Annie P. Burgess. \$10,000.

Eva-Lena Miller Booth Scholarship Fund (1932).

In memory of Mrs. Eva-Lena Miller Booth, by the New York City Chapter of the Daughters of the American Revolution. \$1,000.

Josephine Brand Scholarship Fund (1970).

By bequest of Josephine Brand, the income therefrom to be expended within twenty-five years for scholarships, \$39,919.

Brearley School Scholarship Fund (1889).

By pupils and former pupils of the Brearley School. \$3,000.

Martha Ornstein Brenner Scholarship Fund (1915).

In memory of Martha Ornstein Brenner '99, by her friends. \$4,000.

Arthur Brooks Fund (1897).

As a memorial to the Reverend Arthur Brooks, D.D., Rector of the Church of the Incarnation and Chairman of the Board of Trustees of Barnard College during the first six years of its existence, by Olivia E. Phelps Stokes. \$5,000.

Elizabeth Hobe Burnell Scholarship Fund (1971).

By bequest of Elizabeth Hobe Burnell '20. \$58,041.

Thomas F. Clark Students' Fund (1928).

By bequest of Mrs. Fanny Foster Clark. \$100,000.

Jennie B. Clarkson Scholarship Fund (1898).

By Mrs. W. R. Clarkson. \$3,000.

Class of 1918 Scholarship Fund (1975).

In memory of Marion McCaffrey Backus and other deceased members of the class of 1918, by bequest of Andrew P. Backus, \$3,065.

Class of 1921 Scholarship Fund (1931).

A tenth reunion gift by the Class of 1921. \$2,500.

Class of 1925 Scholarship Fund (1975).

A fiftieth reunion gift by the class of 1925. \$14,625.

Class of 1930 Scholarship Fund (1975).

A forty-fifth reunion gift in memory of Margaret Holland, by the class of 1930. \$6,441.

¹Figures indicate principal of funds as of January 1, 1976.

Class of 1933 Scholarship Fund (1973).

A fortieth reunion gift by the Class of 1933. \$7,589.

Class of 1935 Scholarship Fund (1975).

A fortieth reunion gift by the class of 1935. \$7,580.

Class of 1936 Scholarship Fund (1971).

A thirty-fifth reunion gift by the Class of 1936. \$8,907.

Class of 1953 Scholarship Fund (1973).

A twentieth reunion gift by the class of 1953. \$5,255.

Class of 1954 Scholarship Fund (1955).

Gifts of the Class of 1954 through their twentieth reunion. \$8,877.

Class of 1959 Scholarship Fund (1974)

In memory of Jacqueline Zelniker Radin '59. \$15,025.

Martine Cobanks Scholarship Fund (1973).

From the Estate of Alvena Martine Cobanks '19. \$10,000.

College Bowl Scholarship Fund (1968).

With gifts from the General Electric Company, *Seventeen* Magazine, and Gimbels Department Store, earned by the Barnard College Bowl Team's five successive victories. \$19,500.

Yvonne Moen Cumerford Scholarship Fund (1972).

By bequest of Yvonne Moen Cumerford '23, \$10,000.

Vera B. David Scholarships (1962).

Income from the trust established by bequest of Vera B. David in memory of her late husband, John David.

Ada M. Donelle Scholarship Fund (1948).

By bequest of Mrs. Ada M. Donelle. \$121,751.

L. Adele Dorsett Fund (1971).

By bequest of Herman F. Smaltz in memory of Adele Dorsett Smaltz '06. \$1,000.

Helen Geer Downs Scholarship Fund (1974).

By the Trustees out of funds left to the College by Helen Geer Downs '40. \$10,000.

Sarah Engel Scholarship Fund (1973).

From the Estate of Sarah Engel '15. \$10,000.

Margaret Jane Fischer Scholarship Fund (1968).

With a gift from Margaret Jane Fischer '35. \$10,014.

Fiske Scholarship Fund (1895).

By Mrs. Martha T. Fiske-Collord. \$5,000.

Edyth Fredericks Scholarship Fund (1974).

In honor of Edyth Fredericks, by her niece Ellina Golub. \$5,730.

Doris P. Gallert Scholarship Fund (1970).

By the Trustees out of funds left to the College by a bequest of Doris P. Gallert. \$6,000.

Galway Fund (1912).

By an anonymous donor. \$2,400.

Anita Hyman Glick Scholarship Fund (1968).

In memory of Anita Hyman Glick '62 by her family and friends. \$12,160.

Irma Alexander Goldfrank Fund (1919).

In memory of Irma Alexander Goldfrank '08, by her friends, \$2,106.

Graham School Scholarship Fund (1907).

By the Graham Alumnae Association. \$7,300.

Scholarship Funds

Ethel C. Gray Scholarship Fund (1973).

By the Trustees out of funds left to the College by a bequest of Ethel C. Gray '17. \$5,185.

Louise H. Gregory Scholarship Fund (1955).

With gifts in memory of Louise H. Gregory. \$4,547.

Harkness Scholarship Fund (1939).

With a gift from Edward S. Harkness. \$100,000.

Helen May Smith Helmle Scholarship Fund (1973).

By the Trustees out of funds left to the College by the life income contract of Helen May Smith Helmle '30, \$72,932.

Margaret Holland Scholarship Fund (1975).

In memory of Margaret Holland, by the Trustees out of funds left to the College by Margaret Holland. \$21,677.

Rita Hilborn Hopf Memorial Scholarship Fund (1966).

By bequest of Rita Hilborn Hopf '14. \$270,403.

Charles Evans Hughes Scholarship Fund (1952).

By bequest of Charles Evans Hughes, \$14,300

Lily Murray Jones Scholarship Fund (1950).

In memory of Lily Murray Jones '05, Alumnae Trustee from 1939 to 1943, by Murray, Alfred, and Wallace Jones. \$25,146.

Mildred K. Kammerer Scholarship Fund (1973).

By bequest of Mildred K. Kammerer '19. \$6,000.

Mirra Komarovsky Scholarship Fund (1975).

With gifts from alumnae and other friends.

Elsie M. Kupfer Scholarship Fund (1975).

By the Trustees out of funds left to the College by Elsie M. Kupfer '99. \$12,000.

Augusta Larned Scholarship Fund (1924).

By bequest of Augusta Larned. \$10,000.

Marjorie Herrmann Lawrence Scholarship Fund (1965/67).

In memory of Marjorie Herrmann Lawrence '19. By the Trustees out of funds left to the College and by gifts from the family. \$40,290.

Harriett Mooney Levy Scholarship Fund (1965).

By bequest of Harriett Mooney Levy. \$69,339.

Joan Sperling Lewinson Scholarship Fund (1955).

With gifts from Joan Sperling Lewinson '13. \$37,252.

Judith Lewittes Scholarship Fund (1957).

In memory of Judith Lewittes '55, by her family and friends. \$5,972.

Anne Elizabeth Lincoln Scholarship Fund (1963).

From the estate of Anne Elizabeth Lincoln '24, \$8,441.

Amy Loveman Scholarship.

See Prizes, page 220.

Louise Grace Luby and James Luby Scholarship Fund (1947).

From the estate of Grace Farrant Luby '93. \$5,000.

Jeanne S. Mattersdorf and Bertha Miller Memorial Scholarship Fund (1970).

With a gift from Stephanie Mattersdorf Miller.

Cecile Lehman Mayer Scholarship Fund (1962).

With a gift from Mr. and Mrs. Paul Mazur. \$25,000.

Leo Mayer Scholarship Fund (1972).

In memory of Leo Mayer by his family. Awarded in alternate years by Barnard College and Columbia College to a deserving student. \$2,000.

Adele Duncan McKeown Scholarship Fund (1973).

By the Trustees out of funds left to the College by a bequest of Adele Duncan McKeown '11. \$5,000.

Memorial Scholarship Fund (1954).

To receive contributions in memory of deceased alumnae and friends. \$47,970.

William Moir Scholarship Fund (1912).

In memory of William Moir by his wife. \$10,000.

Gulli Lindh Muller Scholarship Fund (1972).

By the Trustees out of funds left to the College by the life income contract of Dr. Gulli Lindh Muller '17. \$31,901.

Caroline Church Murray Fund (1918).

In memory of his wife, Caroline Church Murray, by George Welwood Murray. \$5,000.

Annette Florance Nathan Scholarship Fund (1947).

From the estate of Frederick Nathan. \$3,000.

Dora R. Nevins Scholarship Fund (1969).

In loving memory of Dora R. Nevins by bequest of Nannie R. Nevins. \$12,500.

Lucretia Perry Osborn Scholarship Fund (1940).

In memory of Lucretia Perry Osborn, a Trustee of Barnard College from 1893 to 1930, by her family and friends. \$5,000.

Elizabeth Palmer Scholarship Fund (1972).

By the Trustees out of funds left to the College by Elizabeth Palmer '15. \$20,000.

Jean T. Palmer Scholarship Fund (1969).

By gifts of alumnae and other friends. \$126,870.

Frances Moore Plunkert Scholarship Fund (1973).

In memory of Frances Moore Plunkert '33, by the Trustees out of funds left to the College by a bequest of William J. Plunkert. \$10,000.

Lucy Powell Scholarship Fund (1971).

By the Trustees out of funds left to the College by the life income contract of Lucy Powell '13, \$5,652.

M. Gladys Quinby Scholarship Fund (1961).

By bequest of M. Gladys Quinby '08 and gifts of friends, \$5,000.

Jacqueline Zelniker Radin Scholarship (1975).

With gifts from the family and friends of Jacqueline Zelniker Radin '59. \$5,004.

Eva Rich Scholarship Fund (1968).

By bequest of Eva Jacobs Rich '07. \$53,243.

Peter C. Ritchie, Jr. Scholarship Fund (1937).

By bequest of Virginia J. Ritchie. \$4,436.

Edith Lowenstein Rossbach Memorial Scholarship Fund (1959).

In memory of Edith Lowenstein Rossbach '19, by her family, friends, and classmates. \$23,304.

Edna Heller Sachs Scholarship Fund (1955).

With a gift from Edna Heller Sachs '10. \$16,260.

Scholarship Funds

May and Edgar Salinger Scholarship Fund (1971).

In memory of Isaac and Eugenie Herrmann by bequest of May H. Salinger. \$688,798.

Eleanor Butler Sanders Scholarship Fund (1922).

By bequest of Henry M. Sanders. \$10,000.

Anna M. Sandham Scholarship Fund (1922).

By bequest of Anna M. Sandham to Columbia University. \$10,000.

Schmitt-Kanefent Scholarship Fund (1931).

By bequest of Catherine Schmitt. \$7,102.

Katherine D. Schlayer Scholarship Fund (1975).

With a gift from Katherine D. Schlayer '43. \$10,000.

Scholarship Fund (1901).

By general subscription through the Scholarship Committee of the Board of Trustees. Approximately \$11,980.

Katherine Flint Shadek Scholarship Fund (1961).

By Katherine Flint Shadek '44. \$22,000.

Max Sloman Scholarship Fund (1971).

By the Trustees out of funds left to the College by a bequest of Max Sloman. \$7,700.

Emily James Smith Scholarship Fund (1899).

In honor of Miss Smith, Dean of Barnard College from 1894 to 1900, by Emily H. Bourne. \$3,000.

Frances M. Smith Scholarship Fund (1974).

By the Trustees out of funds left to the College by Frances M. Smith '32. \$179,638.

George W. Smith Scholarship Fund (1906).

In memory of George W. Smith, a Trustee of Barnard College, by Mrs. Martha T. Fiske-Collord. \$5,000.

Edna Phillips Stern Scholarship Fund (1952).

In memory of Edna Phillips Stern '09, by her family and friends. \$21,797.

Isabel Greenbaum Stone Scholarship Fund (1957).

In memory of Isabel Greenbaum Stone '18, by her family. Recipients of these scholar-ships are urged to repay the amounts they receive as soon as they are in a position to do so. \$21,765.

Fannie Manwaring Sturtevant and Daniel Dwight Sturtevant Scholarship Fund (1969).

With a bequest from Ethel G. Sturtevant, former Assistant Professor of English. \$20,000.

Solon E. Summerfield Foundation Scholarship Fund (1960).

By gifts from the Solon E. Summerfield Foundation. \$19,500.

Thrift Shop Scholarships (1938).

Awarded annually from the proceeds of the Barnard Scholarship Unit of Everybody's Thrift Shop, 330 East 59th Street, New York, N. Y. 10022.

Veltin School Scholarship Fund (1905).

By the alumnae of Mlle. Veltin's School. \$3,000.

Alma F. Wallach Scholarship Fund (1951).

In memory of Alma F. Wallach from the estate of Richard L. Leo. \$8,477.

Ella Weed Scholarship Fund (1895).

In memory of Ella Weed, Chairman of the Academic Committee of the Board of Trustees of Barnard College during the first five years of its existence, by pupils and alumnae of Miss Anne Brown's School. Approximately \$8,602.

Hymen and Helen Werner Scholarship Fund (1964).

In memory of Hymen and Helen Werner. Established by Helen Frankfield Werner '06 in 1953 in memory of her husband. Following her death maintained as the Hymen and Helen Werner Scholarship Fund by her daughters, Therese Werner Kohnstamm '33, Laura Werner Wallerstein '36 and Jean Werner Kane '37, \$11,168.

RESTRICTED1

Mary Gertrude Edson Aldrich Fund (1916).

By Mrs. James Herman Aldrich. For a student, in her senior year, who has shown in her college life the moral qualities which go to the making of fine womanhood. \$1,000.

Bertha R. Badanes Scholarship Fund (1966).

By Bertha R. Badanes '14. For children of New York City school teachers preferably from Brooklyn. If there is no qualified candidate the award may be used for another needy student, preferably from Brooklyn. \$25,000.

Barnard-in-Brooklyn Club Scholarship (1944).

A tuition scholarship with variable stipend. Preference to be given to a student from Brooklyn.

The Barnard College Club of Detroit Scholarship (1958).

A tuition scholarship with variable stipend. Preference to be given to a new student from Metropolitan Detroit.

Barnard College Club of Houston Scholarship Fund (1969).

For students from the Houston area, \$16,125.

Barnard College Club of New York Scholarship Fund (1952).

For a Barnard student whose home is outside the area of the City of New York. \$48,858.

Barnard-in-Westchester Endowment Fund (1962).

By the Barnard College Club of Westchester County. Preference to be given to students from Westchester County. \$18,973.

Barnard School Alumnae Scholarship Fund (1916).

By the alumnae of the Barnard School for Girls. Preference to be given to nominees of the school. \$4,000.

Willing Barrick Memorial Scholarship Fund (1936).

In memory of Willina Barrick '00, by the College Club of Jersey City. Awarded on the nomination of the Club to a graduate of a Jersey City secondary school. \$10,635.

Irving Berlin Scholarship Fund (1950).

By Irving Berlin. For one or more Barnard students of foreign-born parentage. \$23,500.

Madison Henry Bivens Scholarship (1974).

In memory of Madison Henry Bivens by his wife. A grant of \$100 to an outstanding premedical student or one majoring in the social sciences.

Ida Blair Memorial Fund (1937).

In memory of Ida Blair by the Women's Democratic Union. For the purchase of books for a student, preferably one studying political science. \$700.

Alice Marie-Louise Brett Scholarship Fund (1930).

In memory of his daughter, Alice Marie-Louise Brett '15, by bequest of Philip E. Brett. For a student, in the senior year, specializing in French. \$10,000.

¹Figures indicate principal of funds as of January 1,1976.

Scholarship Funds

William Tenney Brewster and Anna Richards Brewster Fund (1961).

By bequest of William Tenney Brewster. To be awarded preferably in amounts not less than \$1,000. \$166,614.

Anne Brown Endowment Scholarship Fund (1939).

In memory of Anne Brown, by the Anne Brown Alumnae Association. For Barnard students from the City of New York. Approximately \$31,339.

Carpentier Residence Scholarship Fund (1919).

By bequest of Horace W. Carpentier. For students who are not residents of New York City or its vicinity. \$200,000.

Therese Cassel Scholarship Fund (1973).

By bequest of Therese Cassel '11. For students who were born in New York City, preferably those whose mothers were born in New York City and attended Barnard College, \$5,000.

Eliza Taylor Chisholm Memorial Scholarship Fund (1901).

By the Alumnae Association of Miss Chisholm's School, which Association reserves the privilege of precedence for such candidates as it may recommend, \$3,000.

Mrs. Henry Clarke Coe Scholarship Fund (1910).

By the National Society of New England Women, now the New York City Colony of the National Society. Awarded, on nomination of the Chairman of the Scholarship Committee of the New York City Colony, to a student from New England or of New England parentage. After the award is made the Society requires from the beneficiary full obedience to discipline and the highest ideals of scholarship. This may be awarded to an entering freshman. \$3,600.

Class of 1919 Decennial Fund (1929).

A tenth reunion gift by the Class of 1919. For a resident student, \$5,050.

Class of 1949 Scholarship Fund (1974).

A twenty-fifth reunion gift by the Class of 1949. For an incoming freshman. \$7,783.

Augusta Salik Dublin Scholarship Fund (1960).

In memory of Augusta Salik Dublin '06, by her family and friends. To enable a student to continue education in preparation for leadership in a field of social welfare, such as social work, social legislation, housing and city planning, or a related area. Available either to a student for undergraduate study or to a graduating student for graduate work, for one or more years. \$13,182.

Christine H. Eide Memorial Scholarships (1968).

Scholarships of \$500 each awarded biannually to students in their junior year who are majoring in anthropology or in English, with preference given to the former.

Educational and Cultural Trust Fund of the Electrical Industry Scholarships (1951).

By the major electrical contracting firms of New York City. For sons and daughters of members of Local Union No. 3 of the International Brotherhood of Electrical Workers. Variable in number.

May Parker Eggleston Scholarship Fund (1972).

By Mrs. Cary Eggleston '04. For a science student, preferably a student planning to attend medical school. \$5,200.

English Scholarship Fund (1920).

By an anonymous donor. For a student of good standing who is specializing in English. If in any year there is no student specializing in English who is particularly deserving of aid, the scholarship may be used to assist a student majoring in some other subject. \$5,000.

Gladys Renshaw Esterbrook Scholarship Fund (1958).

In memory of her daughter, Gladys Renshaw Esterbrook '20, by bequest of Minnie R. Esterbrook. Preference to be given to students majoring in English or French, \$5,000.

Fairfield County Scholarship (1962).

Preference to be given to entering freshmen from Fairfield County for one year only.

Martha T. Fiske Scholarship Fund (1911).

In memory of her sister, Mrs. Martha T. Fiske-Collord, by Anna E. Smith. For a student who is not a resident of New York City or its suburbs. \$5,000.

Helen Jenkins Geer Scholarship Fund (1940).

In memory of her mother, Helen Jenkins Geer '15, by Helen Hartley Geer '40. Awarded annually, after conference with the donor. \$5,000.

German Scholarship Fund (1950).

See Prizes, page 222.

Virginia Gildersleeve International Scholarship Fund (1937).

In honor of the international work of Dean Emeritus Gildersleeve, by Charles R. Crane. For a foreign student coming to Barnard to study. \$15,100.

Virginia C. Gildersleeve Scholarship Fund (1968).

In memory of Dean Emeritus Gildersleeve by the Class of 1923 on their forty-fifth reunion. For a student majoring in the humanities, preference to be given to an English major. \$6.525.

Julius Held Scholarship Fund (1970).

By gifts of alumnae and other friends. For a deserving student majoring in Art History. \$35.881.

Emma Hertzog Scholarship Fund (1904).

With gifts from residents of Yonkers, New York. Awarded in conference with the faculty of the Yonkers High School, to a graduate of that school. \$3,000.

Marion Alice Hoev Fund (1944).

In memory of Marion Alice Hoey '14, by Nellie Poorman. Preference to be given to students studying Greek and Latin. \$2,000.

Hannah and Henry Hofheimer Scholarship Fund (1975).

Scholarship of \$2,000 awarded annually to an entering Barnard freshman.

Holland Dames Scholarship (1915).

In honor of Fanny I. Helmuth, by the Society of Daughters of Holland Dames. Awarded in conference with a representative of the Society to a student descended from the early Dutch settlers.

Lillia Babbitt Hyde Scholarship Fund (1953).

By the Lillia Babbitt Hyde Foundation. For premedical students. \$25,000.

Charlotte Louise Jackson Scholarship Fund (1928).

In memory of Charlotte Louise Jackson, by bequest of her sister, Fannie A. Jackson. For a graduate of a Yonkers High School selected by or under the direction of the Board of Education of Yonkers. \$5,000.

Mary E. Larkin Joline Scholarship Fund (1927).

By bequest of Mary E. Larkin Joline. For a student who is specializing in music. \$10,000.

Werner Josten Scholarship Fund (1955).

With a gift from Mrs. Werner Josten. Preference to be given to a student majoring in

Scholarship Funds

music. If in any year no such student is eligible, the scholarship may be awarded to a student majoring in some other field. \$25,916.

Jessie Kaufmann Scholarship Fund (1902).

In memory of his daughter, Jessie Kaufmann, by Julius Kaufmann. Awarded on the merits of entrance examinations to a student who, after careful investigation, is found to have no relative able to offer financial assistance. It may be held for the entire college course. \$4,000.

Kimball Scholarship Fund (1938).

By bequest of Lillian Emma Kimball. Awarded to a student from Spain or one of the Spanish-American countries who shall pursue a year of graduate or undergraduate study at Barnard or elsewhere, under the direction of the Barnard Department of Spanish. \$32,883.

Eleanor Kinnicutt Scholarship Fund (1911).

In memory of Mrs. Francis P. Kinnicutt, a Trustee of Barnard College. Awarded at the end of the freshman year to a student of exceptionally high standing. It may be held for three years, provided the recipient continues to maintain a high rank. \$5,000.

Dr. Ann G. Kuttner Scholarship Fund (1969).

By the Trustees out of funds left to the College by the life income contract and bequest of Dr. Ann G. Kuttner for financial aid, preferably to premedical students. \$217,008.

Carolina Marcial-Dorado Scholarship Fund (1953).

In memory of Professor Carolina Marcial-Dorado, for many years head of the Barnard College Department of Spanish. Awarded to a student from Spain, or to a Spanish major continuing graduate studies in the United States or abroad. If at any time there is no applicant eligible for the grant, it may at the discretion of the department be awarded to a student who is majoring in Spanish. \$16,230.

Eugene F. and Minnie Gouger McGowan Scholarship Fund (1955).

By an anonymous donor. Preference to be given to candidates from Mecklenburg County, North Carolina. If in any year no such candidate is eligible, the scholarship may be awarded to a student or students from other areas. \$10,000.

Fannie Moulton McLane Scholarship Fund (1961).

By bequest of Fannie Moulton McLane '07. Awarded for tuition to deserving students who are citizens of the United States of America, with preference given to those, if any, who satisfactorily establish that they are of Colonial or Revolutionary ancestry, or the descendants of a Civil War soldier, \$7,500.

Mrs. Donald McLean Scholarship Fund (1906).

By the New York City Chapter of the Daughters of the American Revolution. Awarded, in conference with a representative of the Chapter, to a student who agrees to pursue the study of history (chiefly that of the United States) continuously throughout college. \$3,000.

Ferry Starr Morgan Scholarship Fund (1959).

In memory of her father, by bequest of Grace B. Morgan '19. For a student who is majoring in music or philosophy. \$10,000.

Lawrence Morris Scholarship Fund (1968).

In memory of Lawrence Morris by his sister Mrs. Walter Sturges (Alice Morris '36) and other members of the family. Preference to be given to a nominee of the New York City Mission Society. \$11,590.

Lucy Moses Scholarship Fund (1975).

With a gift from Lucy Moses. Awarded to a pre-medical Barnard student. \$10,000.

Julia Fisher Papper Scholarship Fund (1974).

In memory of Julia Fisher Papper '37, by her husband Dr. Emanuel Papper and friends. Awarded to a senior of superior academic standing who has demonstrated high motivation in work at the College, \$6,530.

Mary Barstow Pope Scholarship Fund (1913).

In memory of Mary Barstow Pope, teacher in Miss Chapin's School, by her friends, her fellow teachers, and her pupils. Awarded on the nomination of a self-perpetuating committee representing the founders. \$4,000.

Public Service Scholarship Fund (1934).

By the Women's Organization for National Prohibition Reform, Awarded to Barnard students of exceptional ability, interested in following a career of public service in the field of political science, who show special promise of future usefulness in the public service. Awarded at the discretion of the Faculty of Barnard College to one or two students in their junior or senior years. In the case of a particularly promising student the Faculty may, at its discretion, extend the award to cover one, two, or three additional years of graduate study at an approved college or university in order to encourage students of exceptional ability to complete a course of study which will fit them for service in public life. \$30,000.

Lucille Pulitzer Scholarship Fund (1899).

In memory of his daughter, Lucille Pulitzer, by Joseph Pulitzer. Three are restricted to students from the City of New York; eight are for resident students. \$176,459.

Marie Reimer Scholarship Fund (1953).

See Prizes, page 219.

Amelia Agostini de del Rio Scholarship Fund (1955).

In honor of Amelia de del Rio, Chairman of the Department of Spanish from 1942 to 1962. Awarded to a student from Mrs. de del Rio's native island of Puerto Rico. If at any time there is no applicant from Puerto Rico eligible for the grant, it may, at the discretion of the department, be awarded to a student who is majoring in Spanish. \$21,333.

Lesley Jane Rosen Memorial Scholarship Fund (1975).

In memory of Lesley Jane Rosen '71, by her mother Rita J. Rosen. For an outstanding Barnard student who shows leadership quality and whose subject of interest is urban studies and/or political science. \$5,000.

Dr. Harry Rosenstein Scholarship Fund (1967).

In memory of Dr. Harry Rosenstein by his wife, Bertha Z. Rosenstein, and daughter, Gertrude L. Rosenstein '48. For a premedical student. \$5,000.

Joan Rosof Scholarship Fund (1964).

In honor of Joan Rosof '61, by her father, Mr. Murray Rosof. For qualified students with the wish, but not the directive, that preference be given to his descendants or, in the absence thereof, to students from the State of New York. \$5,340.

Felix St. George Scholarship (1955).

In memory of her father, Felix St. George, by bequest of Ida St. George. For an incoming freshman whose subject of interest is a science or premedical course, more particularly physics, chemistry, or biology. \$7,455.

Dorothy K. Scheidell Scholarship Fund (1965).

In memory of Dr. Dorothy K. Scheidell '28, by her family, classmates, and friends. For a premedical student. If in any year no student qualifies for the award, it may be deferred until the following year. If no student qualifies over a three-year period, the accumulated income may be awarded to any able student with financial need. \$5,615.

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Scholarship Funds

Lillian Schoedler Scholarship Fund (1967).

By bequest of Lillian Schoedler '11. Income and/or principal awarded to deserving students with financial need who have shown promise of qualities of leadership and/or potentialities for future civic or social usefulness. Awards preferably distributed in small amounts to many students. \$65,860.

Margarete Schwabe Scholarship Fund (1974).

In memory of Dr. Margarete Schwabe by gifts from her daughter, Dr. Monika M. Eisenbud. For a premedical Barnard student with outstanding ability and idealism. \$5,025.

Clarice Ann Smith Scholarship Fund (1973).

By bequests of Clarice Ann Smith '18. For students who in the judgment of the Trustees and Faculty give promise of excellence in the field of literature and composition. \$168,101.

Fred Curtis Smith Memorial Scholarship Fund (1955).

In memory of Fred Curtis Smith, at the time of his death Vice President and Mortgage Officer of the Bowery Savings Bank. \$57,000.

Hilda Staber Scholarship Fund (1967).

By bequest of Hilda Staber '05. For foreign students of character and ability. \$25,000.

Estella Raphael Steiner Scholarship Fund (1972).

With gifts from Mrs. G. Gustav Steiner '23. For a senior of exceptionally high scholastic standing in Biological Sciences who plans to engage in research in that field. \$10,558.

Emma A. Tillotson Scholarship Fund (1910).

By Mrs. Luther G. Tillotson. Awarded at the end of the freshman year to a student of exceptionally high standing. It may be held for three years, provided the recipient continues to maintain a high rank. \$5,000.

Clara Buttenwieser Unger Memorial Fund (1938).

In memory of his daughter, Clara Buttenwieser Unger '13, by Joseph L. Buttenwieser. To assist through the senior year a student whose subject of major interest is government, and who shows promise of ability to contribute to the promotion and perpetuation of true democracy under our Constitution. \$2,500.

Helen Elizabeth Vosburgh Scholarship Fund (1934).

In memory of Helen Elizabeth Vosburgh '25, by bequest of Katherine G. Lippke. Preference to be given to a self-supporting student. \$5,000.

Gertie Emily Gorman Webb Scholarship Fund (1953).

By Charles Webb. For a student nominated by the Department of History. \$4,990.

Alma Gluck Zimbalist Scholarship Fund (1940).

By bequest of Alma Gluck Zimbalist. For a student who wishes to major in political science. \$10,000.

The following funds were established to honor those who have shown exceptional distinction in their chosen field of study.

FELLOWSHIPS

Associate Alumnae of Barnard College Graduate Fellowship (1963).

Awarded annually to a graduate who shows exceptional promise in her chosen field of work. Income on \$50,000. Information and applications may be obtained in the Alumnae Office, 115 Milbank.

Anne Davidson Fellowship Fund (1971).

In honor of Anne Davidson by the R. W. Davidson family and friends. Awarded at the discretion of the faculty committee of the **Program on Environmental Conservation and Management** to a graduating senior who has demonstrated continuing interest in the study of conservation. The holder is to pursue a year's graduate study in conservation at Columbia University or any other university of approved standing. Income on \$23,533.

George Welwood Murray Graduate Fellowship Fund (1930).

By George Welwood Murray. Awarded as an academic honor to that member of the graduating class of Barnard College who, in the opinion of the Faculty, shows most promise of distinction in her chosen line of work in the field of the **humanities** and/or the **social sciences**. Should the recipient prove in no need of financial assistance, she may retain the title and honor but resign the income, which may then be used by the College for other fellowships or scholarships. Students who have graduated in February are eligible as well as those who are to graduate in June. The holder is to pursue a year of graduate study at Columbia or any other university or college of approved standing. Income on \$20,000.

Grace Potter Rice Fellowship Fund (1935).

In memory of his wife, Grace Potter Rice, Instructor and Assistant Professor of Chemistry at Barnard from 1918 to 1934, by Winthrop Merton Rice. Awarded as an academic honor to the member of the graduating class of Barnard College who, in the opinion of the Faculty, shows most promise of distinction in her chosen line of work. Should the recipient prove in no need of financial assistance, she may retain the title and honor but resign the income, which will then be used for other fellowships or scholarships. Students who have graduated in February are eligible, as well as those who are to graduate in June. The holder is to pursue a year of graduate study in the **natural sciences or mathematics** at Columbia or any university or college of approved standing. Income on \$24,000.

Alpha Zeta Club Graduate Scholarship Fund (1936).

By the Alpha Zeta Club, Inc. Awarded at the discretion of the Faculty as an academic honor to a member of the graduating class of Barnard College who, in their opinion, shows promise of distinction in her chosen line of work. It may also be awarded to an outstanding recent Barnard graduate who is a candidate for a higher degree. Income on \$21,038.

William Mason Scholarship (1928).

The William Mason Scholarship in **music** is awarded periodically on recommendation of the Department of Music to a member of the graduating class of Barnard or Columbia College for graduate studies in music. An award of \$500.

PRIZES

General

Estelle M. Allison Prize Fund (1937).

By bequest of Estelle M. Allison. Awarded to a student for excellence in literature. Income on \$1,001.

Mary E. Allison Prize Fund (1937).

In memory of her mother, Mary E. Allison, by bequest of Estelle M. Allison. Awarded to a student for general excellence in scholarship. Income on \$1,001.

Frank Gilbert Bryson Prize (1931).

In memory of Frank Gilbert Bryson, by bequest of Ella Fitzgerald Bryson '94. The President of the College shall fix the method of selecting a senior who, in the opinion of the class, has given conspicuous evidence of unselfishness and who has made the greatest contribution to Barnard during the college years. Income on \$3,000.

The Columbia University Press Prize.

A copy of the Columbia Encyclopedia is awarded by the Columbia University Press to the member of the sophomore class who has done the best writing for Barnard Bulletin.

Eleanor Thomas Elliott Prize (1973).

In honor of Eleanor Thomas Elliott '48 by Mr. John Elliott, Jr. \$500 awarded annually to the outstanding student in the Junior Class, as chosen by the Honors Committee. The balance of the income shall be applied as a financial aid award to the same student or awarded to another deserving student if the recipient of the prize is not on financial aid. Principal \$25,500.

Katharine Reeve Girard Prize (1964).

In memory of Katharine Reeve Girard '33, by her husband, Professor Richard A. Girard, and her friends. Awarded by the Faculty Committee on Honors to a student whose interests are in the international aspects of a major. Income on \$2,500.

The Margaret Holland Bowl (1974).

In memory of Margaret Holland, Professor Emeritus, and Chairman of the Department of Physical Education from 1945 to 1964. Awarded annually for excellence in leadership and participation in the Recreation and Athletic Association.

Margaret Meyer Graduate Scholarship Fund (1952).

In memory of Margaret Meyer Cohen '15, by bequest of Annie Nathan Meyer. Awarded to a student in the graduating class for instruction in secretarial work. Income on \$3,000.

Marian Churchill White Prize Fund (1975).

In memory of Marian Churchill White '29, permanent class president, alumnae president, alumnae trustee, and author of *A History of Barnard College* (1954), by her classmates and other friends. Primary intention: to honor the combination of scholarly promise and service to class and college exemplified by Marian Churchill as an undergraduate. A prize of \$500 awarded annually to an outstanding Barnard student in the Sophomore Class who has participated actively in student affairs, as selected by the Faculty Committee on Honors. The balance of the income to be designated as a grant to the same student if she qualifies for financial aid on the basis of need; if not, to an alternate of comparable merit who does so qualify.

Premedical

Helen R. Downes Prize (1964).

In honor of Professor Emeritus Helen R. Downes '14, Chairman of the Barnard College Department of Chemistry from 1945 to 1960, by former students and friends. Awarded at the end of her senior year to the student who, in the opinion of the Premedical Committee, shows greatest promise of distinction in medicine or the medical sciences. Income on \$1,958.

The Michael T. Glynne Memorial Prize (1971).

By Linda A. Glynne '71. A prize of \$100 awarded annually to the senior accepted by a

medical school who has demonstrated outstanding achievement in the humanities and the social sciences as a non-science major.

Ida and John Kauderer Prize Fund (1973).

Awarded annually to a premedical Barnard student majoring in chemistry. Income on \$1,200.

Art History

Virginia B. Wright Art History Prize Fund (1969).

Awarded to the most promising senior majoring in Art History, Income on \$1,540.

Biological Sciences

Edna Henry Bennett Memorial Fund (1927).

In memory of Edna Bennett '15, Lecturer in Zoology, by her friends. Awarded by the Department of Biology for work at a biological laboratory offering summer courses. Income on \$1.640.

Herrman Botanical Prize Fund (1892).

By Mrs. Esther Herrman. Awarded to the most proficient undergraduate student in biology. Income on \$1,000.

The Herbert Maule Richards Fund (1933).

In memory of Professor Richards, a member of the Department of Botany from 1896 to 1928 and Chairman from 1897 to 1928, by the Barnard Botanical Club, former students, and friends. Granted from time to time to further botanical research, under the direction of an approved institution, to a student or graduate of Barnard College. Principal \$5,000.

Von Wahl Prize (1915).

In memory of Constance von Wahl, '12, President of the Undergraduate Association. Awarded to a student for excellence in biology, on the understanding that it is to be used to continue advanced work in that field. If in any year no student stands out as eminently deserving of the prize, it is not awarded. Income on \$1,300.

Chemistry

American Institute of Chemists, New York Chapter.

Awarded annually to the outstanding student of chemistry who will continue the study of chemistry. A one-year subscription to "The Chemist," and a certificate of honor.

Helen R. Downes Prize (1964).

See Premedical listing.

Ida and John Kauderer Prize Fund (1973).

See Premedical listing.

Marie Reimer Scholarship Fund (1953).

In honor of Professor Emeritus Marie Reimer, for many years Chairman of the Barnard College Department of Chemistry, by former students and friends. Awarded annually at the end of the junior year to an outstanding student majoring in chemistry. In case the winner does not need financial help, the award shall be a prize, the amount to be recommended by the Chemistry Department. The balance of the income shall be awarded by the Director of Financial Aid to an outstanding student at the end of the junior year who is majoring in chemistry and who has financial need. The students receiving financial aid from this fund shall be informed of the source of the award. Principal \$25,100.

Economics

The American Statistical Association Prize, New York Area Chapter (1960).

Awarded annually to the outstanding undergraduate student in statistics. A one-year student membership in the American Statistical Association and \$50.

Katharine E. Provost Memorial Prize Fund (1949).

In memory of Katharine E. Provost. Miss Provost was for twenty-three years Secretary and Assistant to the Controller of Barnard College and, at the time of her death, Superintendent of Buildings and Grounds. Awarded for superior work by an undergraduate major in economics. Income on \$1,000.

Sylvia Kopald Selekman Prize Fund (1960).

In memory of Sylvia Kopald Selekman '20, by Janet Robb. Awarded by the Department of Economics to the freshman who is doing the best work in introductory economics. Income on \$1,000.

Education

Arlene Hershey Memorial Fund (1964).

Awarded annually to a senior in the Education Program.

Stephanie Kossoff Prize (1972).

In memory of Stephanie Kossoff, by her family. A prize of \$100 awarded annually to the student who has made the most noteworthy contribution or meaningful endeavor in early childhood education.

English

Saint Agatha-Muriel Bowden Memorial Prize Fund (1971).

By the Saint Agatha Alumnae Association in memory of its school principal from 1930 to 1940. Awarded for superior proficiency in the study of Chaucer and Medieval Literature. Income on \$1,600.

Cabell Greet Prize Fund (1974).

By family and friends. Awarded to a major for excellence in English: Income on \$2,255.

The Elizabeth Janeway Prize for Prose Writing.

A prize of \$500 awarded annually. Open to all undergraduates for a work of prose, whether fiction or non-fiction, which gives the greatest evidence of creative imagination and sustained ability. The final manuscripts must be submitted to the Chairman of the Department of English by March 15. The prize will be given at the discretion of a board of three judges chosen by the College and the donor.

Amy Loveman Memorial Fund (1956).

In memory of Amy Loveman '01, by her friends and classmates. First charge on the income shall be an annual prize of \$100 for the best original poem by a Barnard undergraduate. Terms of the competition will be announced by the English Department. The balance of the income shall be allocated to scholarships and shall be known as the Amy Loveman Scholarship. Principal \$20,100.

Lenore Marshall Barnard Prizes (1975).

In memory of Lenore Marshall, by The New Hope Foundation. For authors of the best prose and the best poetry published in a literary magazine of the College. Adjudged by the English Department with the aid of such students as it may select. Two at \$100 each.

Sidney Miner Poetry Prize Fund (1962).

In memory of Sidney Louise Miner '14, by bequest of Rosemary Alice C. Thomas. Awarded annually by the Department of English to the senior major who has shown distinction in the reading, writing, and study of poetry. Income on \$5,000.

The Helen Prince Memorial Prize Fund (1921).

In memory of his daughter, Helen C. Prince '22, by Julius Prince. Awarded by the Department of English to an undergraduate student for excellence in dramatic composition. Income on \$1,200.

Stains-Berle Prize Fund in Anglo-Saxon (1968).

In memory of her grandmothers, Caroline Foy Stains and Katharina Mohrherr Berle and in honor of Professor Cabell Greet, by Katherine G. Stains '52. Awarded annually to an undergraduate student for excellence in Anglo-Saxon language and literature. Income on \$1,000.

The Academy of American Poets Prize. (Columbia University)

A prize of \$100, established by the Academy of American Poets for the best poem or group of poems by a student. Awarded by the Department of English of Columbia University at the close of the Spring Term. Manuscripts should be submitted prior to March 15. For further information consult the Chairman of the Department of English and Comparative Literature of the University.

The Bunner Medal. (Columbia University)

The H. C. Bunner Gold Medal, in memory of Henry Cuyler Bunner, is awarded at Commencement to the candidate for a Columbia degree who shall present the best essay on any topic dealing with American literature selected in connection with course or seminar work in American literature and approved by the Chairman of the Bunner Prize Committee. For additional information consult the Departmental Representative for English and Comparative Literature of Columbia University.

Van Rensselaer Prize, (Columbia University)

To the candidate for a degree in Columbia University who is the author of the best example of English lyric verse. Material must be submitted by April 1. Applicants should submit not more than three poems of their own choice, aggregating not more than twenty pages. Income of the Marianna Griswold Van Rensselaer Fund, about \$50. For additional details consult the Department of English and Comparative Literature.

George Edward Woodberry Prize. (Columbia University)

By the Woodberry Society as a memorial to George Edward Woodberry. Awarded every second year to an undergraduate student of the University for the best original poem. Material must be submitted by April 1. Value of prize about \$100. For additional details consult the Department of English and Comparative Literature.

Environmental Conservation and Management

Henry Sharp Prize Fund (1970).

In memory of Henry Sharp, Professor of Geology at Barnard College from 1941 to 1967, by gifts of alumnae, family and friends. Awarded annually to an outstanding student majoring in the program on Environmental Conservation and Management. Income on \$2,770.

French

Helen Marie Carlson French Prize Fund (1965).

In memory of Helen Marie Carlson by her family and friends. Awarded to the student who writes the best composition in fourth-term French (French 4), the course which Miss Carlson directed for many years, or a similar course at the discretion of a board of three judges chosen by the College. Income on \$3,016.

Isabelle de Wyzewa Prize Fund (1972).

In memory of Isabelle de Wyzewa by her family and friends. Awarded to the student who writes the best composition in the French course, Masterpieces of Literature from the Middle Ages to the Twentieth Century, which Professor de Wyzewa directed for many years. Income on \$1,000.

Frederic G. Hoffherr French Prize Fund (1961).

In memory of Frederic G. Hoffherr, Associate Professor of French from 1936 to 1955. Awarded annually to a student in Intermediate French (Course 3) for excellence in oral French. The prize is offered to encourage proficiency among students who are not themselves of French background. The winner is chosen on the basis of a contest sponsored by the French Department. Income on \$1,025.

Eleanor Keller Prizes (1968).

By bequest of Marguerite Mespoulet, Professor Emeritus of French at Barnard College, in memory of Eleanor Keller, Professor of Chemistry at Barnard College. One prize, not exceeding \$1,000, to be awarded annually to a member of the junior class, not necessarily a French major, who has an outstanding record in courses of French literature offered by the department. Another prize, not exceeding \$1,000, to be awarded annually to a member of the senior class, not necessarily a French major, who has an outstanding record in courses concerned with French culture. Principal \$43,517.

Rosemary Thomas Prize Fund in French (1966).

In honor of the poet Rosemary Thomas, by bequest of Helen Marie Carlson, a long-time member of the Barnard College French Department. Awarded annually to the undergraduate student preferably, but not necessarily, a French major, who, in the opinion of the members of the Barnard College French Department, has shown the greatest evidence of a special sensitivity and awareness in the study of French poetic literature. Income on \$10,050.

Geography

Lillian Berle Dare Prize Fund (1974).

Awarded annually to the most proficient Barnard senior majoring in geography who will continue to study in a related field. Income on \$1,000.

German

Dean Prize in German (1925).

By Edward D. Adams for the promotion of the study of German language and literature in Barnard College. Awarded to that member of the senior class who has throughout college done the best work in German language and literature. Income on \$1,000.

German Scholarship Fund (1950).

Awarded at the end of the junior year to an outstanding student majoring in German. In case the winner does not need scholarship help, the award shall be a prize of \$100 and the balance of the scholarship may be given to another able student majoring in German. If in any year no student qualifies for the award, it may be deferred and given to one or more qualified students at a later date. Principal \$13,200.

Greek and Latin

Earle Prize in Classics. (Columbia University)

A prize of \$150, in memory of Mortimer Lamson Earle, Instructor in Greek in Barnard College from 1889 to 1895 and from 1898 to 1900 and Professor of Classical Philology from 1900 to 1905. Awarded to a candidate for the degree of Bachelor of Arts, for excellence in sight translation of passages of Greek and Latin. For further information consult Professor James A. Coulter.

Jean Willard Tatlock Memorial Prize Fund (1917).

In memory of Jean Willard Tatlock '95, by her friends. Awarded to the undergraduate student most proficient in Latin. Income on \$1,250.

History

Eugene H. Byrne History Prize Fund (1960).

In memory of Eugene H. Byrne, Professor of History at Barnard College and Executive Officer of the Department from 1931 to 1949, by his wife, Janet M. Byrne, and friends. Awarded for superior work to an undergraduate majoring in history. Income on \$3,604.

The Jenny A. Gerard Medal (1908).

By the Society of the Colonial Dames in America in memory of Mrs. James Gerard, late President of the Society. Awarded annually to the student who is most proficient in Colonial history.

Italian

Bettina Buonocore Salvo Prize Fund (1966).

By bequest of Bettina Buonocore Salvo '16. Awarded annually to a deserving graduate or other student studying Italian, selected by the Department of Italian. Income on \$5,000.

Speranza Italian Prize Fund (1911).

In memory of Carlo Leonardo Speranza, Instructor and Professor of Italian at Barnard College from 1890 to 1911, by a former student. Awarded to a student for excellence in Italian. Income on \$1,000.

Mathematics

Margaret Kenney Jensen Prize Fund (1973).

In memory of Margaret Kenney Jensen '09, by Miss Evelyn H. McCaskie. Awarded annually preferably to a sophomore or sophomores for excellence in mathematics. Income on \$5,000.

Kohn Mathematical Prize (1892).

By Mrs. S. H. Kohn. Awarded to a senior for excellence in mathematics. Competitors for this prize must have pursued mathematics continuously during their college course. Income on \$1,000.

Music

Robert Emmett Dolan Prize. (Columbia University)

A cash prize awarded annually by the Department of Music to help a student in any division of the University in paying for instruction on a chosen musical instrument. The award was established by an anonymous donor in memory of Robert Emmett Dolan.

Oriental Studies

Taraknath Das Foundation Prize in Oriental Studies. (Columbia University)

A prize of \$50 awarded annually to a student in Barnard College, Columbia College, or the School of General Studies, for excellence in Oriental Studies.

Philosophy

The William Pepperell Montague Prize Fund (1949).

By William P. Montague, Lecturer, Instructor, and Professor of Philosophy at Barnard College from 1903 to 1949. Awarded to a student of Barnard College who, in the opinion of the members of the Department of Philosophy, shows promise of distinction in the field of philosophy. Income on \$5,441.

Physics

Henry A. Boorse Prize Fund (1974).

By alumnae and friends of Dean Boorse on his retirement. Awarded annually to the most promising Barnard sophomore in Physics. Income on \$4,327.

Political Science

Phoebe Morrison Memorial Prize Fund (1969).

Awarded upon recommendation of the Barnard College Political Science Department to a political science major planning to attend law school. Income on \$1,525.

James Gordon Bennett Prize. (Columbia University)

A prize of \$175 established through a gift from James Gordon Bennett may be awarded by the Faculty of Political Science, with the approval of the Chairman of the Bennett Prize Committee, for the best essay upon some subject of contemporary interest in the domestic or foreign policy of the United States. The competition is open to students not

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holding a Bachelor's degree who pursue satisfactory courses in political science. Manuscripts should be submitted prior to the last day of classes of the Spring Term. For additional information consult Professor Joseph A. Rothschild.

The Caroline Phelps Stokes Prize. (Columbia University)

The Caroline Phelps Stokes Prize of \$100 is awarded at Commencement to that student who has been a degree candidate for at least one academic year in Columbia College or Barnard College and who has written the best essay on any topic approved by the Stokes Prize Committee, which has been presented in course or seminar work. Material should be submitted by January 1. For additional information consult the Departmental Representative for Political Science.

Psychology

The American Statistical Association Prize, New York Area Chapter (1960). See Economics listing.

Religion

Caroline Gallup Reed Prize Fund (1916).

In memory of her mother, Mrs. Sylvanus Reed, by Mrs. William Barclay Parsons for the recognition of outstanding work either in the field of the origin of Christianity and early church history or in the general field of the history and theory of religion. Awarded to the student who shows the highest excellence in one of these fields of work. The award is made partly on the basis of an essay to be handed in by April 1. Details regarding the scope of the essay may be obtained from the Department of Religion. Income on \$1,000.

Spanish

Spanish Prize (1959).

A prize of \$100 awarded annually to a Spanish major who, in the opinion of the Department, has done the most distinguished work in Spanish language and literature. Principal \$2,500.

Susan Huntington Vernon Prize. (Seven Colleges)

A prize of about \$25, the annual income of the fund established in 1941 by pupils and friends of Mrs. Vernon, in tribute to her work at the Hispanic Institute, and augmented by her in 1943. The prize is awarded, on recommendation of the Chairman of the Department of Spanish, for the best original essay written in Spanish by a senior whose native language is not Spanish, but who is taking language courses at Barnard, Bryn Mawr, Mount Holyoke, Radcliffe, Smith, Vassar, or Wellesley.

Urban Studies

Suzanne Farkas Urban Affairs Prize (1972).

By Mr. Robin Farkas. A prize of \$500 awarded annually for the best essay in Urban Affairs.

The Associate Alumnae of Barnard College is made up of sixteen thousand members from all states of the Union and more than seventy-three foreign countries. The Associate Alumnae serve the College in three important ways: by interpreting Barnard to the community; by keeping local secondary school students informed about Barnard; and by aiding in the support of the College.

The Associate Alumnae functions through a group of officers, directors, and alumnae trustees elected by members of the Association. The central office of the Associate Alumnae is in 115 Milbank Hall.

Barnard College Clubs, the Alumnae Council with nationwide membership, and a group of qualified and authorized alumnae make it possible to find spokesmen for Barnard at distances far from New York. Students who are considering Barnard may find it helpful to talk personally with the Barnard Area Representative living nearest them. A list of these representatives as well as officers of the Associate Alumnae is given below.

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Santa Barbara

Emily M. Chervenik, 1606 Shoreline Drive, 93109

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Mary W. Bodenstab (Mrs. Harold), 30 Paxon Drive, Penarth, 19803

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Peggy Ellen (Mrs. James Kutcher), 4405 Brandywine Street, N.W., 20016 Mrs. Charles B. Ruttenberg, 4735 Butterworth Place, N.W., 20016

See also Rockville and Silver Spring, Md., and Annandale, Va.

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Mrs. Willard R. Brown, 3720 Harlano Street, 33134

Miami

Dorothy Irvine Fulton (Mrs. Robert N.), 7375 S.W. 108th Terrace, 33156

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Jane Vanderkarr Basile (Mrs. Juan C.), 117 Driftwood Avenue, 32074

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ILLINOIS

Chicago

Dabney Smith Goold (Mrs. James A.), 4700 Lake Park, Apt 1607, 60615

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IOWA

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Ms. Margaret Brennan (Mrs. Dan), 3915 Forest Avenue, 50311

KANSAS

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Miss Jo Clare Mangus, P. O. Box 397, 67735 See also St. Joseph, Mo., and Tulsa, Oklahoma.

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Mrs. Alfred L. Causey, 1206 Riverside Drive, 71201

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Mrs. Argentine Black Fisher, 1712 Soniat Street, 70115

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MINNESOTA

Minneapolis

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MISSOURI

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Mrs. William H. Guenther, Jr., 1901 Lovers Lane, 64505

St. Louis Area

Mrs. Audrey G. DeVoto, 938 Penny Lane, Ballwin, 63011

NEBRASKA

Omaha

Miss Margaret Weymuller, 122 South 39 Street, Apt. 605, 68131

NEW JERSEY

Millburn

Mrs. Peter S. Dykema, 201 Sagamore Road, 07041

Princeton

Miss Julie Hudson, 49 Palmer Square, 08540

NEW YORK

Albany

Dr. Helen Hutchinson Burnside, 129 Devon Road, Delmar, 12054

Buffalo

Miss Barbara Mann, 1024 Kensington Avenue, 14215

Ithaca

Miss Aya Betensky, 113 Blair Street, 14850

Poughkeepsie

Mrs. Lawrence A. Heaton, 101 Ferris Lane, 12603

Rochester

Mrs. Marvin N. Goldstein, 20 Varinna Drive, 14618

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Greensboro

Nahomi Harkavy (Mrs. Jonathan), 609 Rockford Road, 27408

Southport

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OHIO

Cleveland

Mrs. A. D. Perry-Miller, 86 Clairhaven Drive, Hudson, 44236

Shaker Heights

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Ms. Anna H. James, 4562 Penridge Road, 43615

OKLAHOMA

Tulsa

Dorothy B. Barton (Mrs. Jackson M.), 3115 South Delaware Place, 74105

OREGON

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PENNSYLVANIA

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Pittsburgh

Jane McCune Waugh (Mrs. James D.), 6405 Howe Street, 15206

Wallingford

Mrs. Eugene G. Monaco, 126 Westminster Drive, Sproul Estates, 19086

PUERTO RICO

Santurce

Mrs. Etienne Totti, Jr., 1306 Lucchetti Street, 00907

QUEBEC

St. Laurent

Mrs. Henry Etingin, 785 Dorais Street

RHODE ISLAND

Providence

Dr. Louise Sadler Kiessling, 31 Adelphi Avenue, 02906

TEXAS

Dallas

Mary Davis Williams (Mrs. Clifford K.), 4215 Ridge Road, 75229

Houston

Dr. Barbara Day (Mrs. Jonathan), 4044 Wickersham, 77027

San Antonio

Natalie Mayer Beller (Mrs. Barry M.), 370 Pike Road, 78209

Tyler

Mrs. James R. Montgomery, 1015 Watkins Street, 75701

VIRGINIA

Annandale

Mrs. John T. Fischbach, 8115 Gale Street, 22003

Norfolk

Mrs. Edward R. Willcox, Jr., 518 Pembroke Avenue, 23507

Richmond

Mrs. Heth Owen, Jr., 3 Greenway Lane, 23226

WASHINGTON

Richland

Mrs. Bjorn Lih, 2122 Harris Avenue (P. O. Box 923), 99352

Seattle Area

Mrs. Robert Laurich, 2238 79th Avenue, N.E., Bellevue, 98004 Mrs. Stuart R. Swanberg, 3622 45th Avenue West, 98199

Spokane

Mrs. Will L. Lorenz, S 11910 Player Drive, 99203

WEST INDIES

Jamaica

Mrs. John T. M. Girvan, 50 Daisy Avenue, Kingston 6

WISCONSIN

Madison

Marlene J. Berkoff (Mrs. Herbert), 25 North Yellowstone Drive, 53705

Milwaukee

Dr. Bonnie B. Oh, 2231 West Apple Tree Road, Glendale, 53209

Port Edwards

Mrs. Terrence O. Norris, 731 Wisconsin River Drive, 54469

	1889	1899	1909	1919	1924	1929	1934	1939	1944	1949	1954	1959	1964	1969	1971	1972		1974	
No. of the last of	to 1890	to 1900	to 1910	to 1920	to 1925	to 1930	to 1935	to 1940	to 1945	to 1950	to 1955	to 1960	to 1965	to 1970	to 1972	to 1973	to 1974	to 1975	10 1976
•			1	11/2		1										J-1111			
Undergraduates, Regular																			
Seniors		40	62	87	126	227	181	164	208	260	245	325	355	433	490	477	548	572	553
Juniors		40	122	190	259	237	220	191	314	277	340	356	414	480	512	548	546	554	486
Sophomores		37	109	193	234	247	226	210	314	272	317	352	391	517	542	498	485	488	469
Freshmen	14	54	188	224	271	311	267	246	324	271	304	385	415	485	455	470	443	437	453
Unclassified students					57	54	103	143	56	17	1	9	8	21	2	24			4
1 37 5 10	14	171	481	694	947	1076	997	954	1216	1097	1207	1427	1583	1936	2001	2017	2022	2051	1965
Special Students:																			
Matriculated		21	24	39															
Nonmatriculated			30	22	33	28	29	31	21	15	20	28	19	22	27	32	30	33	40
Departmental (1889-1896)	22																		
Music students																			
(1896-1904, 1914-1915)		41		****		1,4,4,4													
	22	62	54	61	33	28	29	31	21	15	20	28	19	22	27	32	30	33	40
Contract Constants		10.00																	
(1890-1900)		82															1,000		
Total Registration	36	315	535	755	980	1104	1026	985	1237	1112	1227	1455	1602	1958	2028	2049	2052	2084	2005
																100		,	
Degrees Conferred:			00	4.00	400	047	001	200	070	202	250	247	267	437	491	487	497	495	
A.B		39	88	139	198	247	221	206	270	303	258	347	367	437	491	407	497	490	
B.S. (1909-1918)		10	2	5															
A.M. (1898-1900) Ph.D. (1899-1900)		18					* * * *												
Fn.D. (1899-1900)																47.1.			

Total Bachelor's Degrees conferred 1893-1975: A.B. 18,188, B.S. 77.

These figures represent registration in the Autumn Term plus students admitted in the Spring Term.

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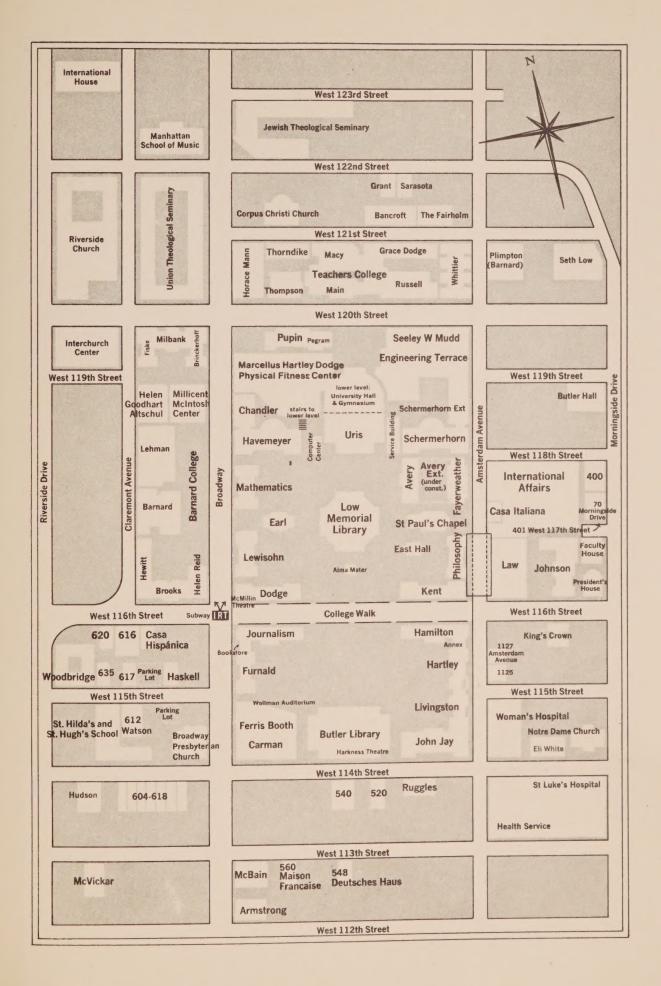
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Barnard College 606 West 120th Street New York, New York 10027